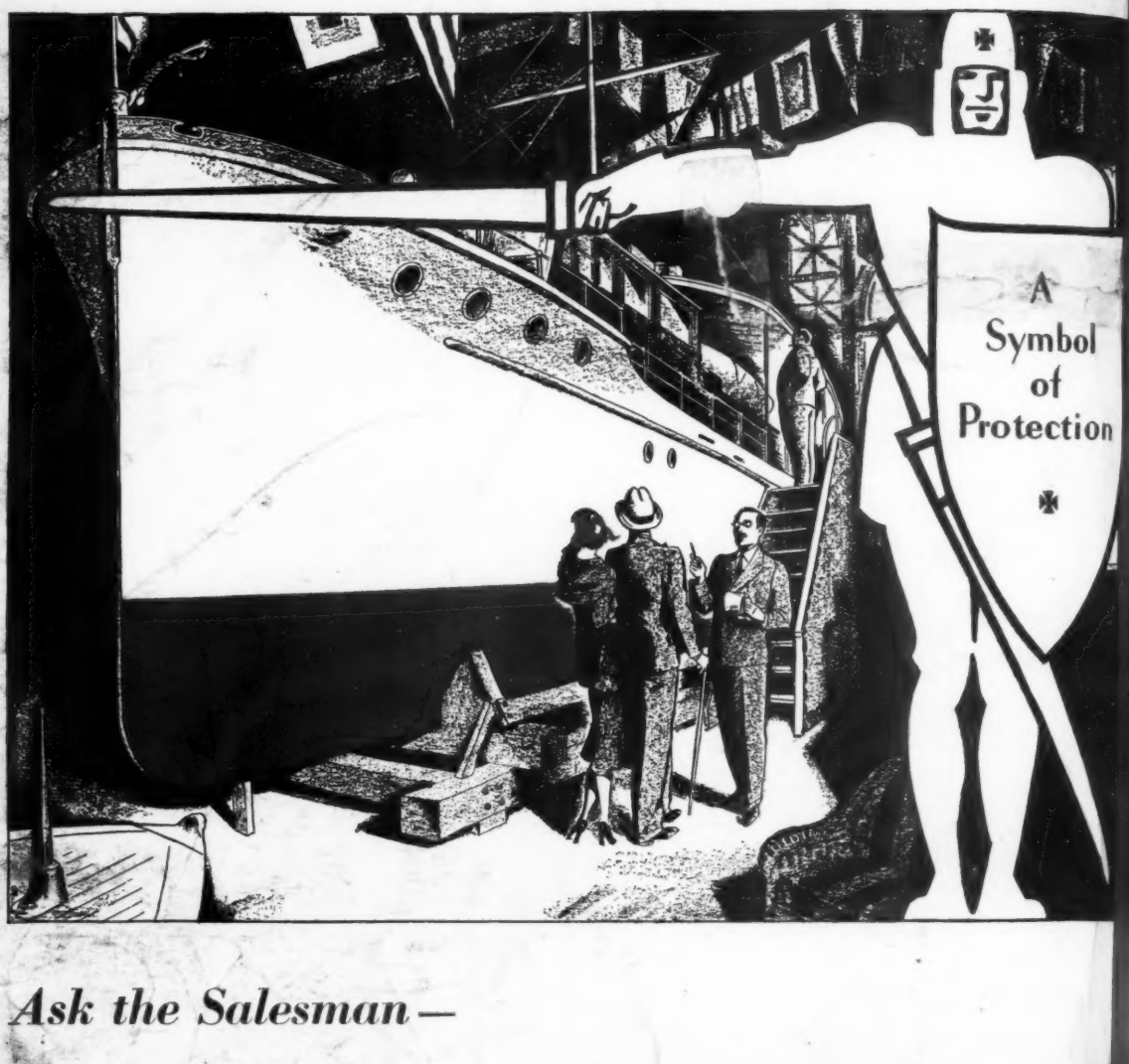
MOTOR BOATING
The Yachtsmen's Magazine
35 Cents
GOLD CUP
NUMBER



Ask the Salesman—

"Is this boat equipped with ALFITE?

You won't have to ask him whether your trim cruiser is safe and seaworthy. Modern marine engineering assures *that*. And modern engineering provides *another* safeguard which removes the last danger of loss to your boat or interruption of your cruise. The ALFITE System—to safeguard your boat against fire.

Nothing gives more security while out of contact with the shore than the ALFITE System. ALFITE Gas, sure death to fire but harmless to anything else, is stored in small steel cylinders which take up very little room. Fixed piping carries the gas to all points where fire is most likely to break out. One pull of a control lever, *outside* the fire zone, discharges ALF Gas. In a few seconds the fir snuffed out—for fire and ALF Gas cannot both exist in the s space—and ALFITE always wi

Send for free booklet describing ALFITE System and showing typica stallations. *Offices in all principal c*

AMERICAN-LA FRANCE AND FOA CORPORATION, DEPT. S-21, ELMIRA,

LA FRANCE AND FOAMITE PROTECTION

AN ENGINEERING SERVICE

AGAINST FIRE

You Can Beach

These Speedy, Luxurious, Electric-starting Runabouts

STOP ANYWHERE

Mooring buoys and docks not needed

CRUISE ANYWHERE

Their powerful Sea-Horse outboard motors are concealed like inboards — yet tilt safely over logs, rocks, shoals

Illustrated at top— 17½ ft. Aquaflyer De Luxe Runabout. Sealite construction; V-bottom. Speeds up to 25 miles per hour with Electric-starting Sea-Horse "32," $760. Other boats $125 and up.

Electric-starting Sea-Horse "32"—the 4-cylinder monarch of outboards, $395. Others $125.00 and up.

NOW come the comfort, fine appointments, racy lines and speed of a costly inboard runabout at a fraction of the cost for maintenance and operation. These outboard Aquaflyers, unlike inboards, do not require a deep-water mooring place.

Aquaflyers, premier ships of the Johnson fleet, start electrically, and steer and control from the driver's seat like a motor car. Their cruising speeds are from 22 to 25 miles per hour.

These new-type craft have the motor concealed in a covered hatch — this provides ⅓ more usable space, equal in the 20-ft. Aquaflyer to a 26-ft. inboard.

The hull construction, too, is revolutionary. In the mahogany 20-footer the seams are self-locking. In the 17½-ft. Aquaflyer, and in the smaller Johnson boats, is introduced a seamless, watertight construction called Sealite.

It is non-absorbing hence always dry, and 50% lighter in service. These boats require no calking or care in storage or use, they are ⅓ stronger than ordinary wood boats, and guaranteed to outlast them.

Mail Coupon for Color-Catalog

Before buying any inboard or outboard send for Johnson's color-catalog illustrating a complete range of Sea-Horse motors and boats. See the new Electric-starting models and the 7 exclusive features of these speed champion motors, including Release Charger that cuts hand-starting effort in half, and Water-cooled Underwater Exhaust. Mail coupon today. Partial Payments. All prices f. o. b. factory.

All dealers carry first-aid service parts. Sales and service stations in all parts of the country.

JOHNSON MOTOR COMPANY, 3012 Pershing Rd., at the Lake, Waukegan, Illinois. *In Canada:* Canadian Johnson Motor Company, Ltd., Peterboro, Ontario. *World's Largest Manufacturer of Outboard Motors and Matched Units.*

Pack a Johnson Sea-Horse Portable Outboard Motor on your car—and you are off for the finest kind of pleasure trip, a combination tour and cruise.

JOHNSON MOTOR CO.,
3012 Pershing Road,
Waukegan, Ill.

Gentlemen: Kindly send color-catalog and name of nearby Johnson dealer who can demonstrate.

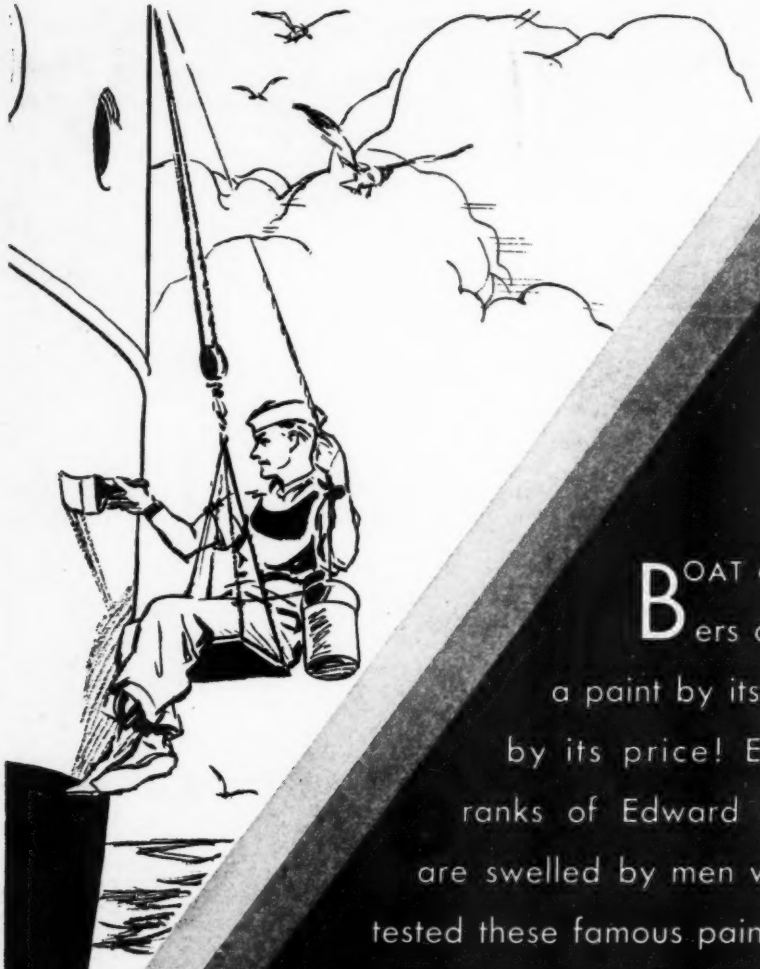
Name.....

Address.....

City.....*State*.....

JOHNSON *Matched* UNITS
SEA-HORSES & BOATS

MoToR BoatinG, August, 1930. Volume XLVI, No. 2. Published monthly at 57th Street at Eighth Avenue, New York, U. S. A., by International Magazine Co., Inc. Yearly subscription price: United States, $3.00; Canada, $3.00; Foreign, $4.00. Entered as second-class matter April 15, 1925, at the Post Office at New York, under the act of March 3, 1879. (Printed in U. S. A.)



BOAT owners and boat builders are learning to judge a paint by its finish rather than by its price! Each year the ranks of Edward Smith users are swelled by men who have tested these famous paints and know their worth. They have discovered that a Smith finish always finishes the season! And with refinishing so easy . . . THEY'RE SATISFIED!

EDWARD SMITH & COMPANY

LONG ISLAND CITY NEW YORK

Makers of Marine Paints and Varnishes since 1827

Edward Smith Yacht White . . . made only from finest pigments and pure hard fossil gums . . . whiter than a North Pole panorama . . . never turns yellow in Southern seas . . . quick drying . . . long wearing . . . most economical. Color cards and literature sent on request.

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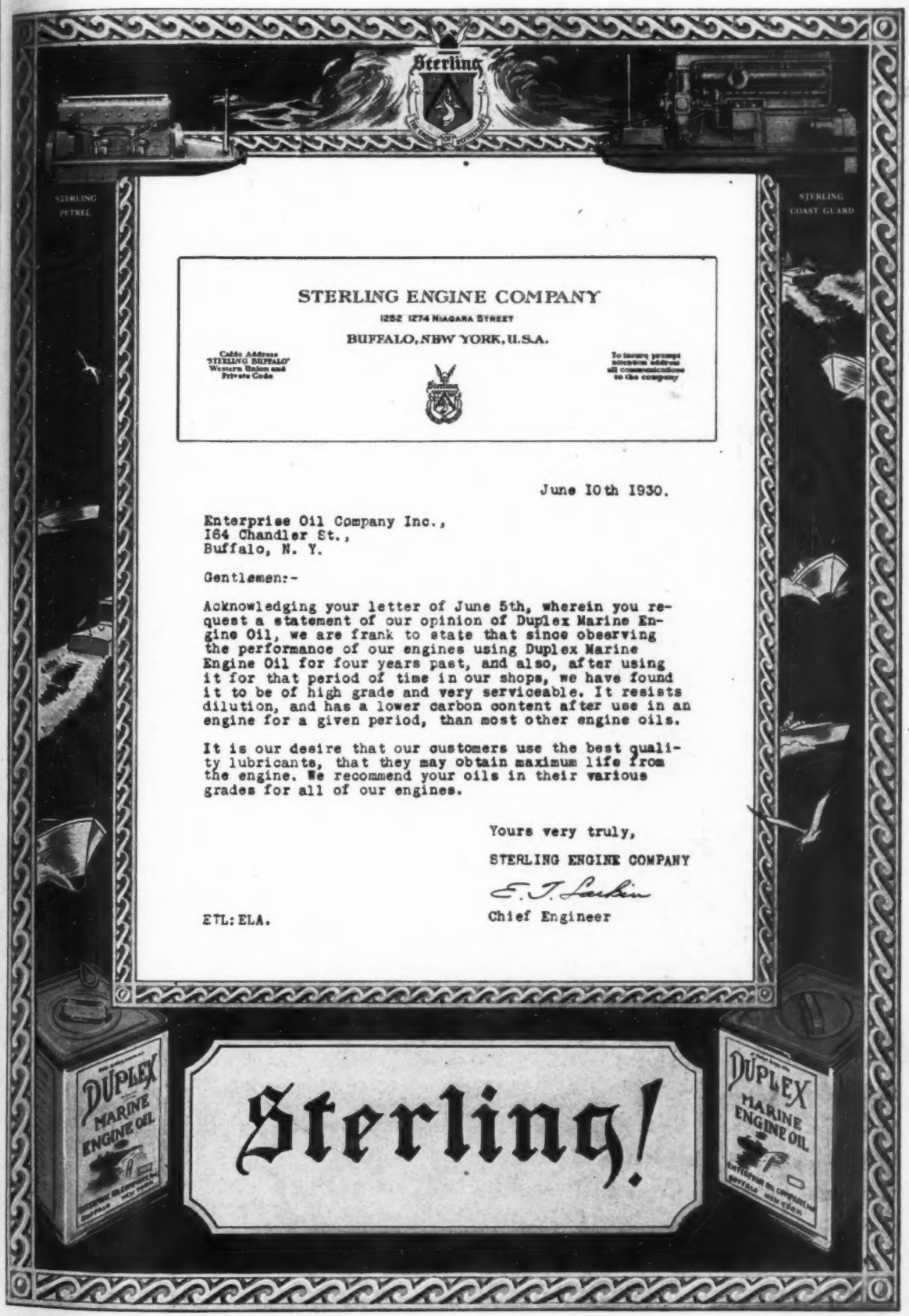
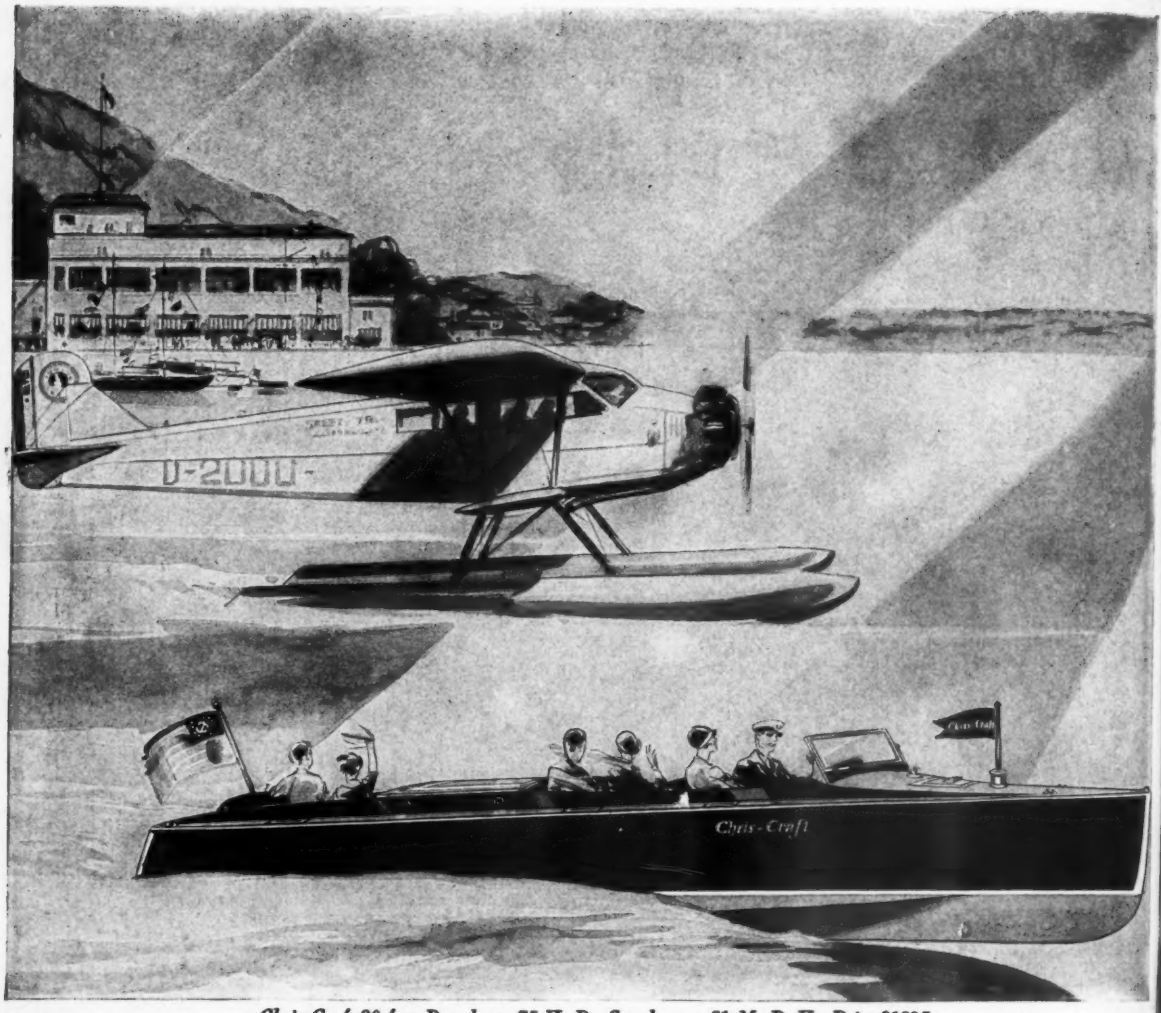

Sterling
STERLING PETREL
STERLING COAST GUARD
STERLING ENGINE COMPANY
1252 1274 NIAGARA STREET
BUFFALO, NEW YORK, U.S.A.
Cable Address "STERLING BUFFALO" Western Union and Private Code
To insure prompt attention address all communications to the company
June 10th 1930.
Enterprise Oil Company Inc.,
164 Chandler St.,
Buffalo, N. Y.
Gentlemen:-
Acknowledging your letter of June 5th, wherein you request a statement of our opinion of Duplex Marine Engine Oil, we are frank to state that since observing the performance of our engines using Duplex Marine Engine Oil for four years past, and also, after using it for that period of time in our shops, we have found it to be of high grade and very serviceable. It resists dilution, and has a lower carbon content after use in an engine for a given period, than most other engine oils.
It is our desire that our customers use the best quality lubricants, that they may obtain maximum life from the engine. We recommend your oils in their various grades for all of our engines.
Yours very truly,
STERLING ENGINE COMPANY
E. T. Larkin
Chief Engineer
ETL: ELA.
DUPLEX MARINE ENGINE OIL
Sterling!
DUPLEX MARINE ENGINE OIL



Chris-Craft 20-foot Runabout, 75 H. P., Speed up to 31 M. P. H., Price $1895

CAST OFF in your Chris-Craft motor boat, with family or friends, and forget there ever was a heat wave. ' ' ' Speed over the waters, bow pennant whipping in the breeze. Visit waterside friends. Entertain summer guests in a way that will be long remembered. Commute to and from home and office in a craft as luxurious as your motor car. ' ' ' Develop sturdy, self-reliant qualities in those thrill-loving youngsters by giving them the means of enjoying a clean, wholesome new sport. ' ' ' Whatever your tastes or desires, a Chris-Craft anticipates them. Flashing speed for those who seek action. Tranquil cruises for those who want restful relaxation. Transportation for those whose work and play lie far apart. A Chris-Craft handles more easily than a motor car. Let your nearest Chris-Craft merchant demonstrate Chris-Craft pleasures or write for illustrated catalog. Chris-Craft Corp., 388 Detroit Road, Algonac, Michigan.

22-foot Runabout, 75 H.P., Speed up to 30 M. P. H., Price $2195

22-foot Runabout, 125 H. P., Speed up to 36 M. P. H., Price $2595.

A few desirable sales territories open. Wire for details.

Chris-Craft

Leadership that is Ever Increasing

25 Models—Runabouts—Sedans—Commuters—Cruisers—Yachts—17 to 48 feet—$1295 to $35,000

Advertising index will be found on 3rd last page

Will Your Boat Have a good Summer, Too?

A long cruise, or a series of short trips, whichever you choose — you plan the itinerary, you put in supplies — you do many things.

But have you insured complete relaxation and enjoyment? How about your boat? Will its smooth performance be hampered by inadequate equipment? See that it is well equipped with Pioneer Marine Instruments. They not only register present conditions but also warn you of impending trouble.

Send for Pioneer Marine Instrument Catalogue

Pioneer Engine Instruments indicate speed and distance, and, regardless of temperature, vibration or moisture, they tell you how the engine is operating. They help avoid burned out bearings, over heated engines, or the ignominy of dry tanks.

Pioneer Navigation Instruments help you keep your course, in clear or thick weather, in strange or familiar waters.

Pioneer Instrument Panels have the instruments conveniently arranged for quick reading. They may be indirectly illuminated, and can be had in almost any finish to carry out the color scheme of your boat.

Your dealer can supply you.

PIONEER INSTRUMENT COMPANY

INCORPORATED · · · DIVISION OF BENDIX AVIATION CORPORATION

754 LEXINGTON AVENUE · · · BROOKLYN NEW YORK

309 DEARBORN BLDG., DEARBORN ⋆ BENDIX BUILDING, LOS ANGELES ⋆ 15 SPEAR ST., SAN FRANCISCO ⋆ 420 W. DOUGLAS ST., WICHITA ⋆ 8034 W. 63RD ST., CHICAGO
527 SUSSEX ST., OTTAWA ⋆ STERNPLATZ 13 JOHANNISTHAL BERLIN ⋆ GENERAL EUROPEAN REPRESENTATIVE, M. CALDERARA, 11 BIS RUE MONTAIGNE, PARIS

Consider the low cost of Chrysler Marine Engines

There is a Chrysler Marine Engine for any type of boat, from an 18-foot runabout to a 75-foot cruiser—at prices that offer substantial savings to both builders and owners.

MAXIMUM Brake H. P.	and R. P. M.	TYPE	LIST PRICE
152	3200	MAJESTIC TYPE "C" 8-cylinder—3½" x 5"	$1350
152	*1600	MAJESTIC TYPE "CMR" 8-cylinder—3½" x 5"	1495
125	3200	IMPERIAL TYPE "A" AND "C" 6-cylinder—3⅜" x 5"	1095
106	2800	IMPERIAL TYPE "A" AND "C" 6-cylinder—3⅜" x 5"	1055
65	1600	IMPERIAL TYPE "AM" 6-cylinder—3⅜" x 5"	1015
125	*1600	IMPERIAL TYPE "AMR" 6-cylinder—3⅜" x 5"	1195
106	*1400	IMPERIAL TYPE "AMR" 6-cylinder—3⅜" x 5"	1155
82	2800	ROYAL TYPE "A" AND "C" 6-cylinder—3¼" x 5"	935
50	1600	ROYAL TYPE "AM" 6-cylinder—3¼" x 5"	865
50	*800	ROYAL TYPE "AMR" 6-cylinder—3¼" x 5"	1010
75	3200	CROWN TYPE "C" 6-cylinder—3⅛" x 4⅛"	635

* *With Chrysler Built-in 2 to 1 Reduction Gear*

For further information, address Marine Engine Division, Chrysler Corporation, Detroit, Mich., or any of the distributors listed below.

DISTRIBUTORS

BOARDMAN & FLOWER
San Francisco, Cal.

SEATTLE MARINE SUPPLY CO.
Seattle, Washington

YACHT & MOTOR SALES CORP.
Wilmington, California

J. H. HUTCHINSON
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BOEING AIRCRAFT OF CANADA, LTD.
Vancouver, B. C.

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Houston, Texas

NOYES MARINE SALES
Boston, Mass.

MARINE EQUIPMENT & SUPPLY COMPANY, INC., Philadelphia, Pa.

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MADDOX ENGINEERING COMPANY
Toronto, Ontario

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CONSOLIDATED SHIPBUILDING CORPORATION
New York City

WHEELER SHIPYARD
Brooklyn, N. Y.

ROY M. BREWSTER
Bay Shore, L. I., N. Y.

Chrysler MARINE ENGINES

CHRYSLER MOTORS PRODUCT

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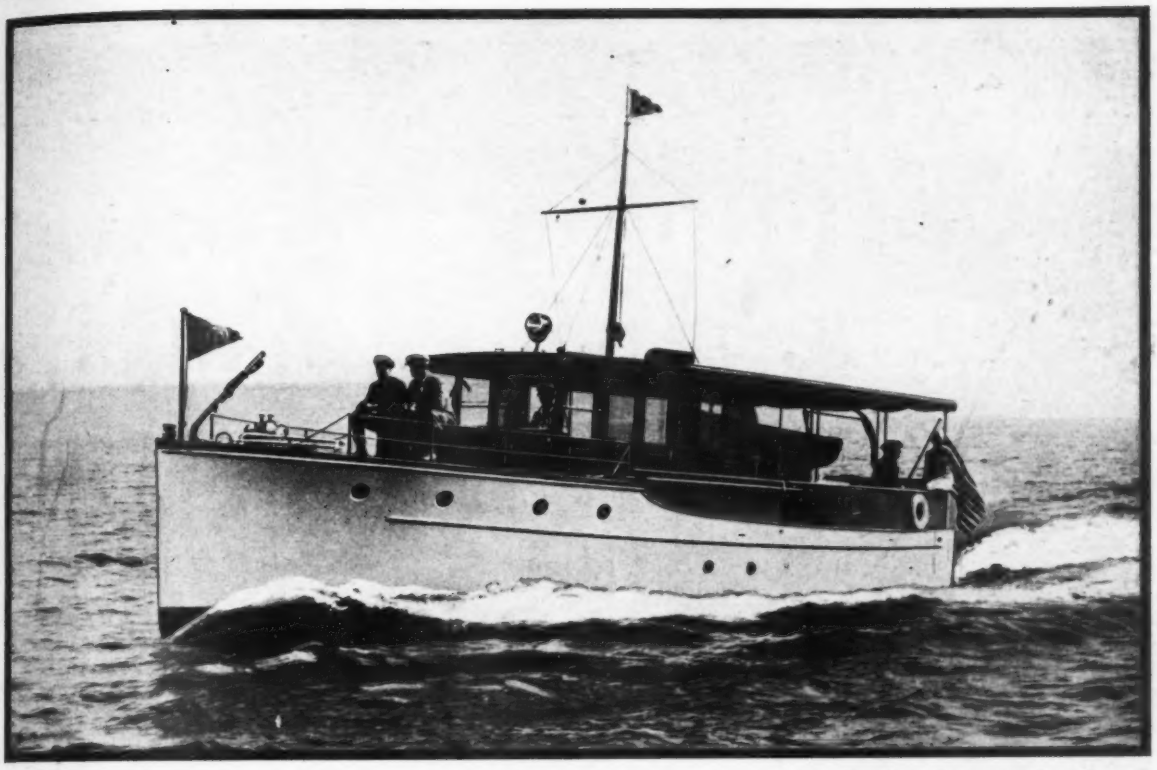


The Elco Forty-two Foot Cruiser

Yacht-like perfection . . . at modest cost

VISIT PORT ELCO OR WRITE FOR COMPLETE INFORMATION

You are invited to visit Port Elco, 247 Park Avenue at (46th Street), New York, where the entire Elco Fleet is now on display. Or, address Dept. MBG, Port Elco, for full particulars and descriptive literature. (Plant and Marine Basin at Bayonne, N. J.)

ELCO CRUISERS ARE ALSO DISPLAYED, SOLD AND SERVICED BY:

PORT ELCO OF BOSTON
126 State Street, Boston, Mass.

Washington Motor Boat Sales Agency
1344 Connecticut Ave.....Washington, D. C.

Ludington Aircraft, Inc.
Atlantic Building.....Philadelphia, Pa.

Yacht & Motor Sales Corp.
Wilmington.....California

Eastern Marine & Yacht Co.
354 Howard Avenue.....Bridgeport, Conn.

Roy M. Brewster
Bay Shore.....Long Island, N. Y.

W. J. H. Dyer
East Greenwich.....Rhode Island

Frank D. Homan
Amityville.....Long Island

Fulton Marine Co.
138-140 East 4th St.....Cincinnati, Ohio

Luxury, fine workmanship, noteworthy performance—these qualities need have no relation to the size of pleasure-craft. . . . Recognizing the need for compact, economical cruisers that still retain the distinction of the finest yachts afloat, the builders of Elco Cruisers have neglected no detail in the 42 foot model. . . . The deck-house is completely enclosed, offering absolute protection on wet or windy days. The two fully appointed staterooms, each equipped with private lavatory, are fitted with permanent berths that yield the utmost sleeping comfort. There are accommodations for an owner's party of six, and while the boat can easily be handled by the owner, quarters are provided for a paid hand, should one be desired. . . . The Elco 42 foot Cruiser is sound in construction, reliable in performance, inexpensive in operation and up-keep. At the price of a modest summer cottage, it provides its owner with a delightful floating home that long will remain a proud possession.

Elco CRUISERS

THE ELCO FLEET

Twenty-seven Foot Marinette	$ 3,475
Thirty Foot Veedette	5,750
Thirty-five Foot Cruisette	7,750
Thirty-eight Foot Cruiser	11,850
Forty-two Foot Cruiser	17,500
Fifty Foot Motor Yacht	26,500

(Afloat, Bayonne, N. J.)

(Elco operates a liberal financing plan for those wishing to purchase cruisers out of income.)

Nothing *Finer* Can Be Said of Any Motor Boat Than, It is -

POWERED BY LYCOMING

LYCOMING MOTORS

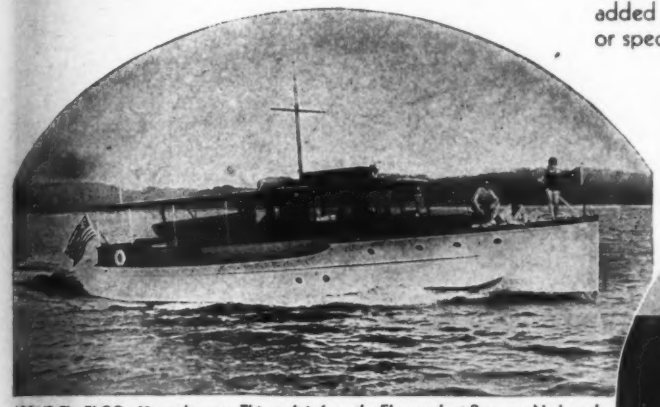
LYCOMING MANUFACTURING CO.
WILLIAMSPORT, PENNSYLVANIA

It is significant that Dodge Boats are exclusively powered by Lycoming Marine Engines

Advertising index will be found on 3rd last page

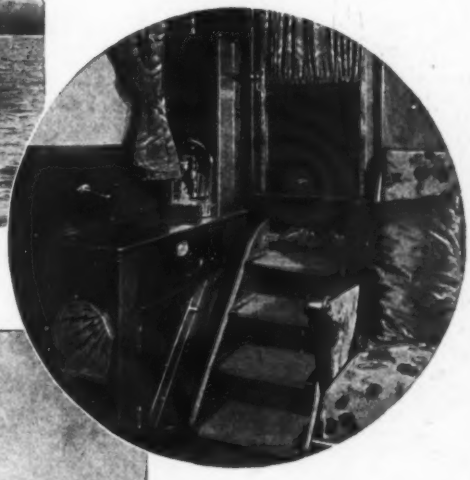
You'll find Crosley Radio in the Finest Craft Afloat

WHILE the installation of Crosley Screen Grid Battery Radio in water craft is not as costly as other similar installations, it is a notable fact that you'll find Crosley Radio in the finest craft afloat. In the adoption of Crosley Radio by boat builders as standard equipment, quality of performance alone has been the deciding factor. At the last New York show there were eighteen boat builders of national reputation who displayed models equipped with Crosley Radio, either as standard equipment or as an added accessory. It can be installed in your present boat or specified to be built into any craft you may purchase. It is fully shielded from all motor noises and is free from outside electrical disturbances. Your Crosley dealer can supply you with full information.

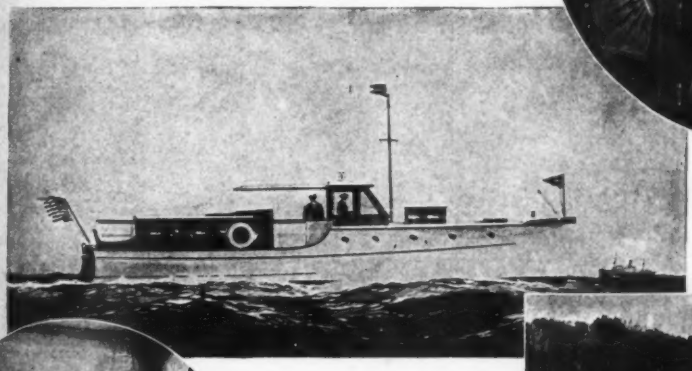


ABOVE: The ELCO «38» under way. This craft is from the Elco yards at Bayonne, N. J., and has installed in it a Crosley Screen Grid Battery Receiver with Power Speaker as standard equipment.

BELOW: This DAUNTLESS «42» was equipped by Millard, Brewster & Chambers, shipwrights, with a Crosley Screen Grid battery Receiver and Power Speaker.



IN CIRCLE: This illustration shows a Crosley Screen Grid Battery Receiver with Power Speaker as standard equipment in the new CHRIS-CRAFT YACHT, Model 123, the finest CHRIS-CRAFT ever launched and the flagship of that famous fleet.



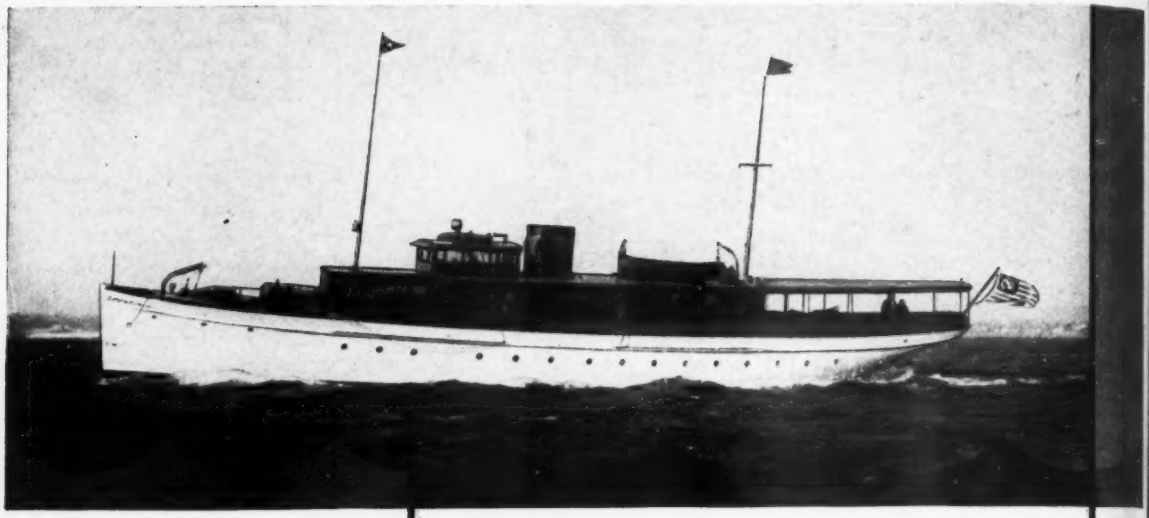
IN CIRCLE: Interior of the FAIRFORM FLYER built by Huckins Yacht Corporation of Florida showing installation of Crosley Screen Grid Battery Receiver with Power Speaker and phonograph. This equipment is standard in this fine craft, illustrated under way at right.

THE CROSLEY RADIO CORPORATION POWEL CROSLEY, JR., *President* **CINCINNATI, OHIO**

Home of WLW — *"the Nation's Station"*

You're *THERE* with a Crosley

CROSLEY RADIO



SPINDRIFT, 105′ 1¼″ o. a., powered with two 6-cyl. lightweight, airless injection Winton-Diesels... Luders' designed and built for Mr. Donald Parsons

●

She's As Smart a Craft at Anchor As She is on the High Seas!

LUDERSHIP . . . the boat you're proud to own . . . the craft that spells distinction in every curve of her streamline hull. And next season, when you admire her from the Yacht Club porch, you'll be glad you were foresighted enough to plan her *now*, in plenty of time for the exquisite refinements of construction only Luders can build into a Ludership.

And you'll appreciate her beauty on any sea . . . the staunchness and perfect balance permits comfort in any weather. The carefully planned engine installation eliminates vibration without sacrifice of speed.

May we submit plans and specifications designed to your requirements now for spring or Florida delivery?

N.B.—There's a smart 45-footer available for immediate delivery due to the owner's change in plans. She's in condition now . . . ready to take you to the Races. Write for particulars.

LUDERS

MARINE CONSTRUCTION COMPANY

Stamford, Connecticut

LUDERSHIP MEANS LEADERSHIP

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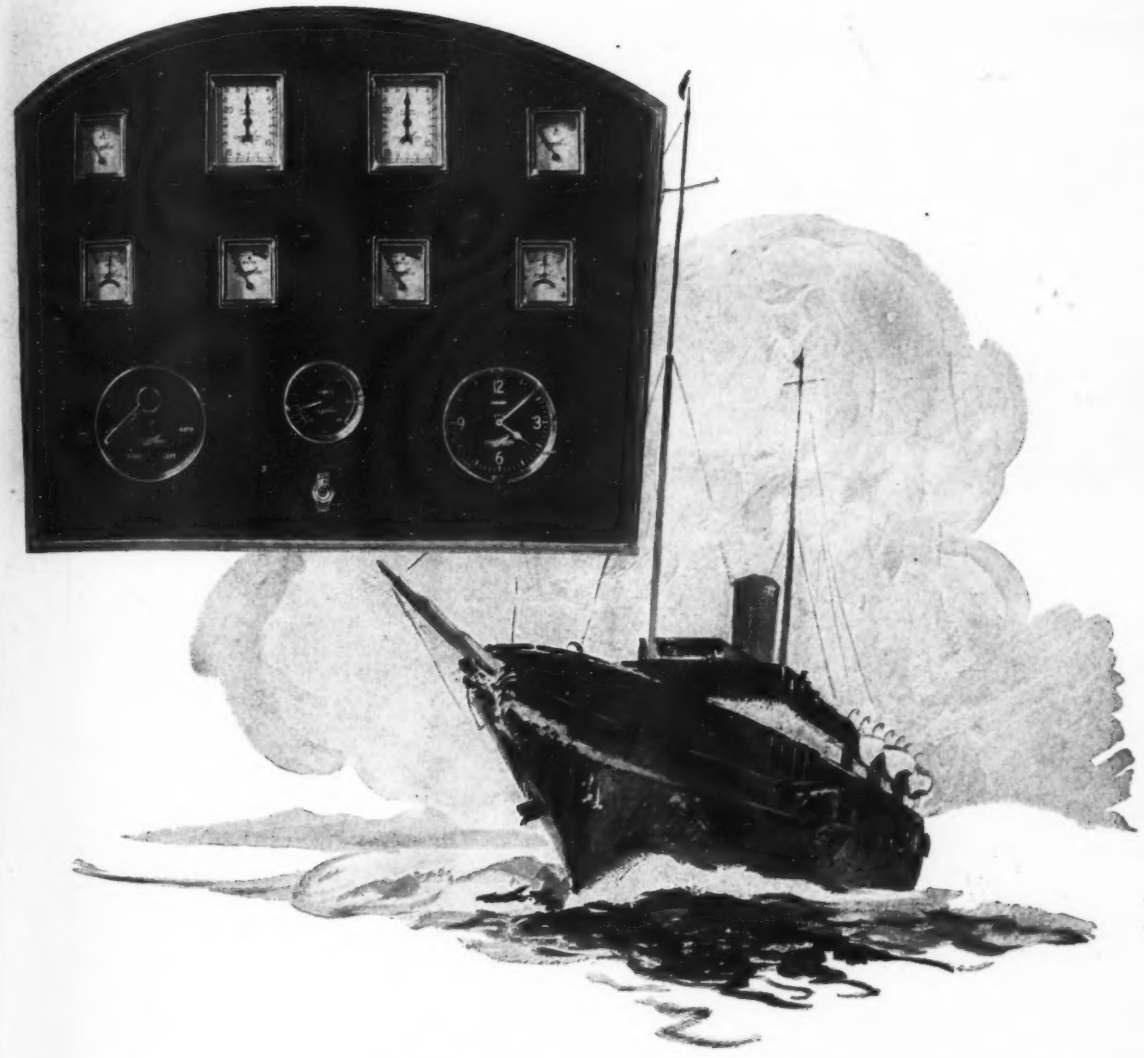


NOW that the sport-boat, run-about, the cruiser and the fine yacht are dashing away over summer waters, it is good to recall how many of them, the products of America's best boat-makers, are carrying standard instrument panels from the workshops of Consolidated Instruments.

Not alone panels of standard design, but custom-built panels, to gratify the artistic demands of Naval Architects, have been the ambition and attainment of our Marine Instrument Division.

CONSOLIDATED INSTRUMENT CO.

of AMERICA, INC.

Baltimore St. and Central Ave. - Baltimore, Md.

Divisions

Julien P. Friez and Sons, Inc., Baltimore, Md.

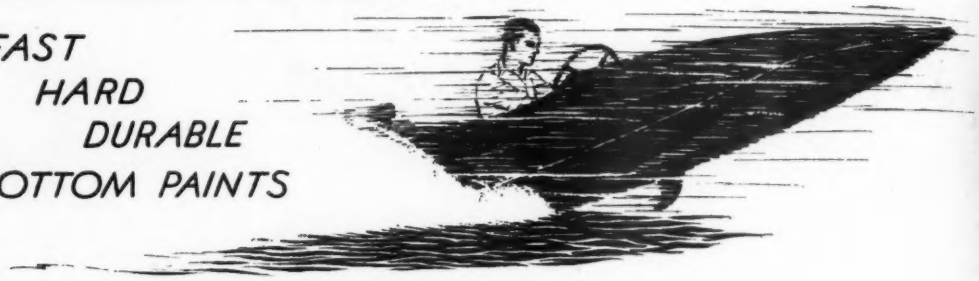
Molded Insulation Co. Mt. Vernon, N. Y.

Aircraft Control Corp. Philadelphia, Pa.

FACTORY BRANCH, WICHITA, KANSAS - Sales, Service and Repairs, 221 S. Lawrence St.

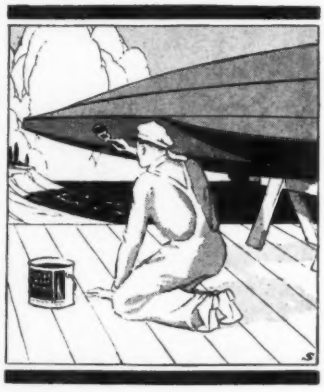
SPEED

FAST
HARD
DURABLE
BOTTOM PAINTS



The Fast Crandall Comet, Model D-E, carries a Climax Finish

For a smooth, hard bottom finish, use CLIMAX BOTTOM PAINTS—the modern anti-fouling paints that give you maximum speed and durability. Last longer, easier to apply—an economical finish, too. Made in three attractive shades of green. For speed boats, runabouts and commuters CLIMAX HARD RACING BOTTOM PAINTS provide the fastest and most permanent bottom finishes. Will not soften in water. Supplied in red or green. CLIMAKOTE, the flat coater, with CLIMAX YACHT WHITE or BLACK, gives your hull a finish of sparkling, lasting beauty. Try CLIMAX, the paint developed to a new formula especially for the boating industry. Used by leading boat builders in all parts of the country. On sale from coast to coast.



THE CLIMAX CLEANER MFG. CO., CLEVELAND, OHIO

DISTRIBUTORS

NEW YORK—E. J. Willis Co.

BOSTON, MASS.
Chase Parker Co.

DETROIT, MICH.
Weisgerber Paint & Varnish Co.

SEATTLE, WASH.
Pacific Marine Supply Co.

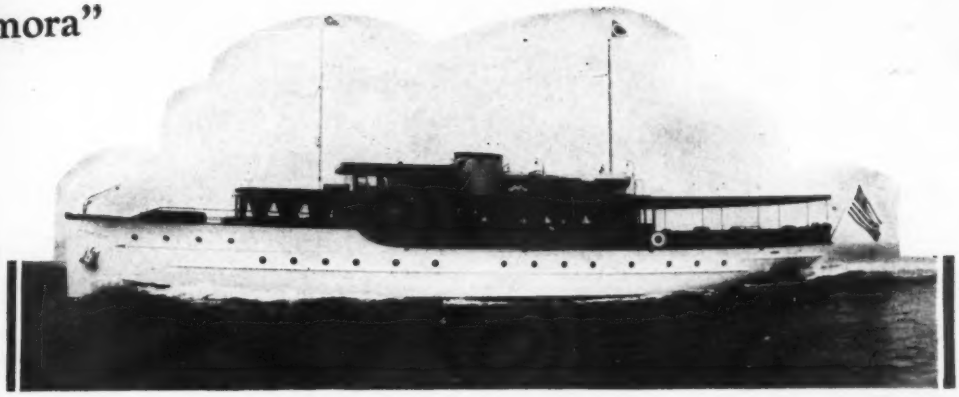
SAN FRANCISCO, SAN PEDRO and SAN DIEGO, CAL.
The C. J. Hendry Co.

Dealers Everywhere

CLIMAX
BOAT PAINTS

Advertising index will be found on 3rd last page

"Lamora"



TWO OUTSTANDING EXAMPLES OF FINE YACHT-BUILDING

Over thirty years of the finest type of boat-building as practised in America are crystalized in the two boats pictured here and recently delivered to their owners. They are indeed illustrious examples of marine craftsmanship.

The "LAMORA" is 92 feet long with an 18-foot beam. "SUNSHINE III" is 100 feet long with a 19-foot beam. Both are powered with two 200 h.p. Winton Diesel Motors. The hulls are double planked; outside finish of houses and decks is Teak; inside finish of houses is Mahogany; inside finish below is Ivory and Mahogany trim.

The interior arrangement of both boats consists of two double and two single staterooms with three baths. The dining room is in the forward deckhouse; the lounge is in the aft deckhouse. The finish and appointments, in each case, conform specifically to the individual owner's ideas and desires.

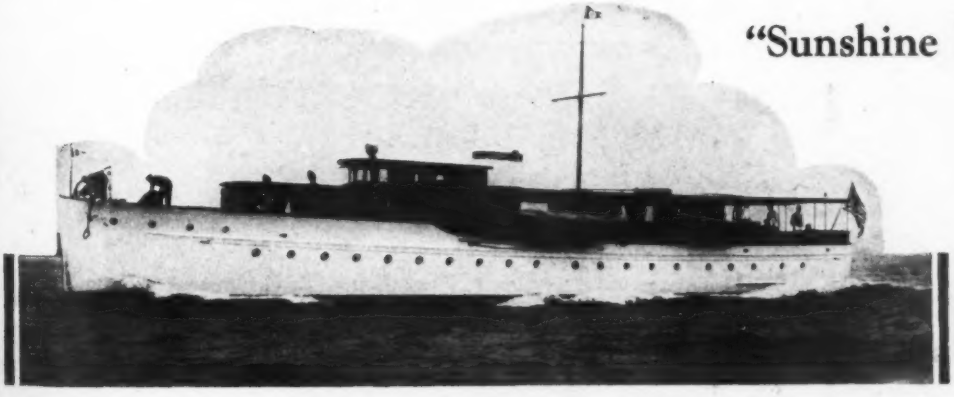
We are prepared to duplicate this fine craftsmanship and finish in your new yacht. Why not let us submit plans and specifications with proposals covering your ideas? We specialize in yachts from 40 feet to 125 feet.

The NEW YORK YACHT, LAUNCH & ENGINE CO.

Morris Heights, New York City

Phone: SEDgwick 4880

"Sunshine III"



HOLLEY
DOWNDRAFT CARBURETOR

used by

Chrysler, Gray, Kermath, Lathrop, Lycoming, Murray & Tregurtha, Scripps, Chris-Craft, Speedway and Sterling

HOLLEY CARBURETOR COMPANY
DETROIT, MICHIGAN

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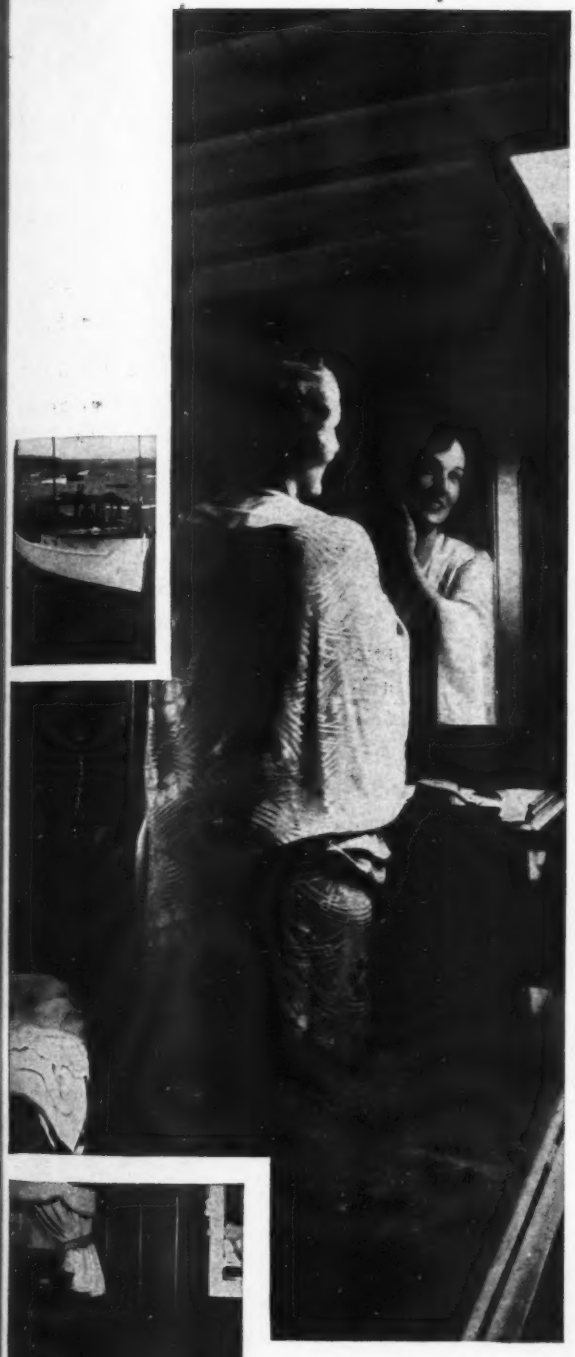


Before the *Guests* come aboard

THE yachtsman enjoys showing the living conveniences of his Dawn Cruiser, but his wife takes real comfort from using them. Independent cabins, each with its own toilet facilities, for owner, guests and crew, dressing rooms where wet bathing suits may be removed without getting the stateroom carpets all soggy, plenty of big dresser drawers in which to keep dainty things fresh and lovely, honest-to-goodness mirrors and dresser tops; they are all necessary luxuries.

Dawn Twin-Screw Cruisers are as near perfection as small yachts can be made. Beautiful in lines, perfect joiner work of real mahogany, quality in hangings, carpets, upholstery and matched hardware all indicate to the even casual observer the care that is used when building them. But to fully appreciate the Dawn layout and equipment, you must live aboard one of them for an extended period. May we send you a catalog?

●

DAWN BOAT CORPORATION, Clason Point, New York City
Westchester 7000 **Established 1906**

DAWN TWIN-SCREW CRUISERS

Dawn 45-footer . . . Powered by twin-Lathrops, each 70 HP. . . . Speed 14 M. P. H. . . . $17,900 afloat at Clason Point
Dawn 48-footer Express . . Powered by twin Sterling Petrels, each 150 HP. . . {5¼" x 6"} . . Speed 20 M. P. H. . . $25,800 afloat at Clason Point

NONCHALANCE

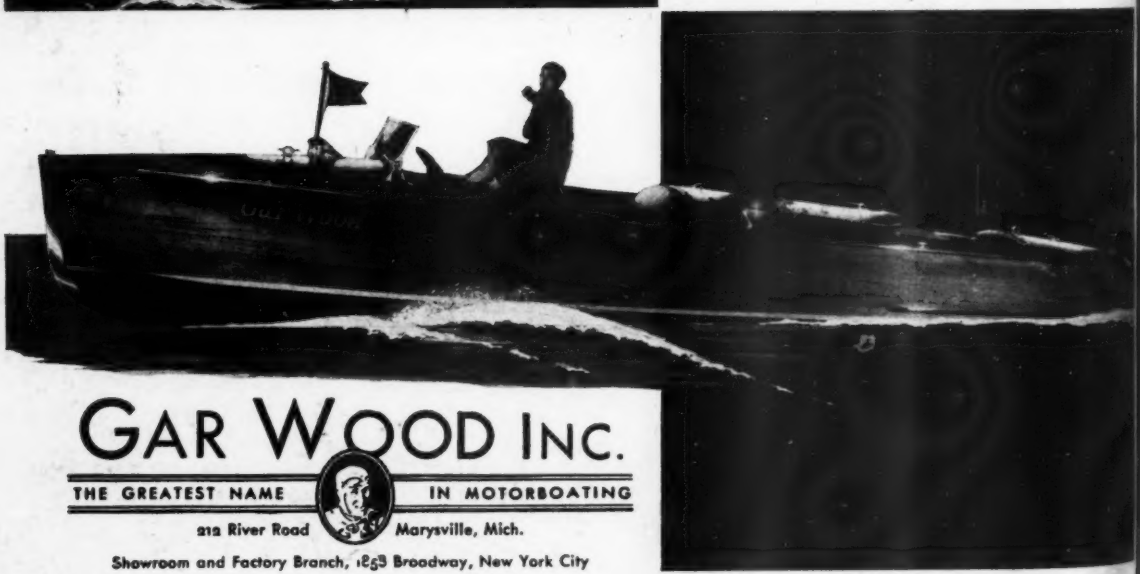
demands the secure knowledge of supreme seaworthiness, of smooth, instant responsiveness to rudder and throttle, of lithe eager grace of line, of a beauty of finish that can only come from the last caressing touches of craftsmen whose hearts and souls are in the thing they build.

Wide open or at half throttle, at the club landing or out where the waves begin, the Gar Wood skipper enjoys that indescribable luxury of nonchalance.

Not everyone, to be sure, crosses on the queenly flagships of the Atlantic passenger fleets. Not everyone can. Neither does everyone who thrills to eager speed and dashing smartness of trim runabouts own a Gar Wood. But those who know their boats, whose habit is to have what they want, turn to the Miss America craftsmen for the last word in seagoing satisfaction.

14 New Models
30 to 55 m. p. h.
$2,250 to $12,950

S. S. Bremen by North German Lloyd. Gar Wood (Model 28-40) by the Miss America craftsmen, powered by Scripps. We did not inquire as to whose powder the young lady is using.



GAR WOOD INC.

THE GREATEST NAME IN MOTORBOATING

212 River Road Marysville, Mich.

Showroom and Factory Branch, 1253 Broadway, New York City

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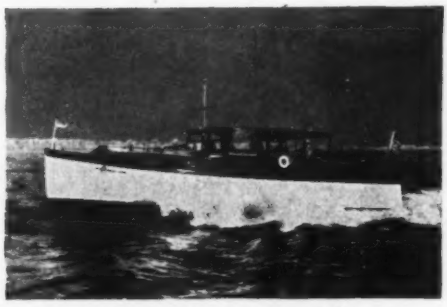
12 LEADING BOAT BUILDERS INSTALL LUX AS STANDARD...



Two popular Wheeler "Playmate" Cruisers. Lux is standard on both models.

WHEN the leading boat builders of the country install LUX Fire Extinguishing Systems as standard equipment, they do so backed by the solid facts that LUX has saved over 250 boats and many lives from fire... that LUX protects over 2,000 motor craft...and that LUX reliability is assured by the accumulated experience of its manufacturer who pioneered carbon dioxide fire extinguishing.

No matter how terrific, the LUX System puts out gasoline or oil fires in 10 seconds. LUX acts by smothering the flames under a cloud of carbon dioxide gas. Carbon dioxide gas is non-poisonous, but flames cannot exist in air containing so little as 15% of it.

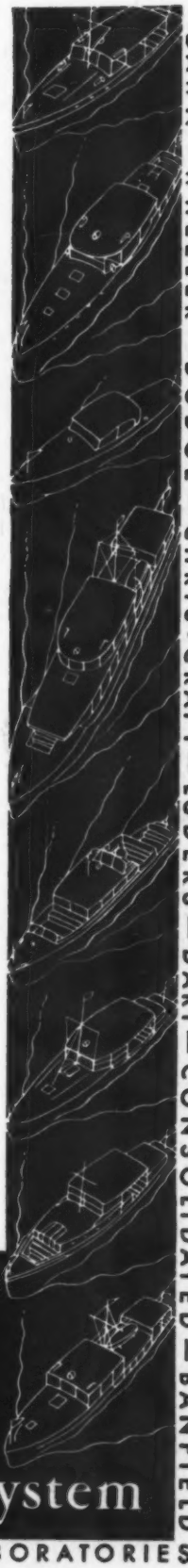
A control handle located safely outside of the fire area releases the gas. A simple piping system fills every hidden corner of the bilge and engine space with it.

If, this summer, you want to cruise without danger or dread of fire... to give your boat as well as your friends on board proven protection against disaster, you will do well to investigate the LUX System.

LUX Systems can be installed without laying up your boat. Ask your boat yard or write us for complete details.

Walter Kidde & Company, Inc.
140 Cedar Street
New York

Send for free booklet "Cruising Without Fears", describing the operation of the LUX System.



DAWN—WHEELER—DODGE—CHRIS-CRAFT—LUDERS—DART—CONSOLIDATED—BANFIELD

LUX

Fire Extinguishing System

LABELED BY UNDERWRITERS' LABORATORIES

YOUR

MOTOR

WILL TELL

YOU WHY!

WE COULD reel off a lot of reasons why you'll find Pennzoil a better oil for your inboard or outboard motor. For example: The fact that Pennzoil comes from the finest and costliest crude money can buy—100% pure Pennsylvania—or the fact that Pennzoil is the *only* Pennsylvania oil refined by the famous Pennzoil process, which uses only the *heart* of that crude—the fraction richest in lubrication efficiency. And so on.

But we don't expect technical information like this to make you go out of your way to buy Pennzoil. So we suggest: *Let your motor tell you why!* Give Pennzoil one trial and see the *immediate* difference it makes in motor performance. Notice the extra power and smoothness it gives you under every operating condition.

That's because Pennzoil keeps *all* parts of your motor lubricated *all* the time. It penetrates to vital working surfaces ordinary oils simply don't reach. It keeps your inboard or outboard in top form all summer long.

Use Pennzoil consistently and you'll find that it actually saves you money. It safeguards you against worn-out parts and costly repair jobs, and adds to the lifetime of the motor. After one season's experience with Pennzoil you'll agree with the millions of Pennzoil users who call it "the best motor oil in the world." Sold by reliable dealers everywhere in grades suitable for all types of motors.

The Pennzoil Co.
Executive Offices and Refinery: Oil City, Pa.; Division Offices: New York, Chicago, Los Angeles.

PERMIT NO. 2—PENNSYLVANIA GRADE CRUDE OIL ASS'N

PENNZOIL

HIGHEST QUALITY PENNSYLVANIA OIL

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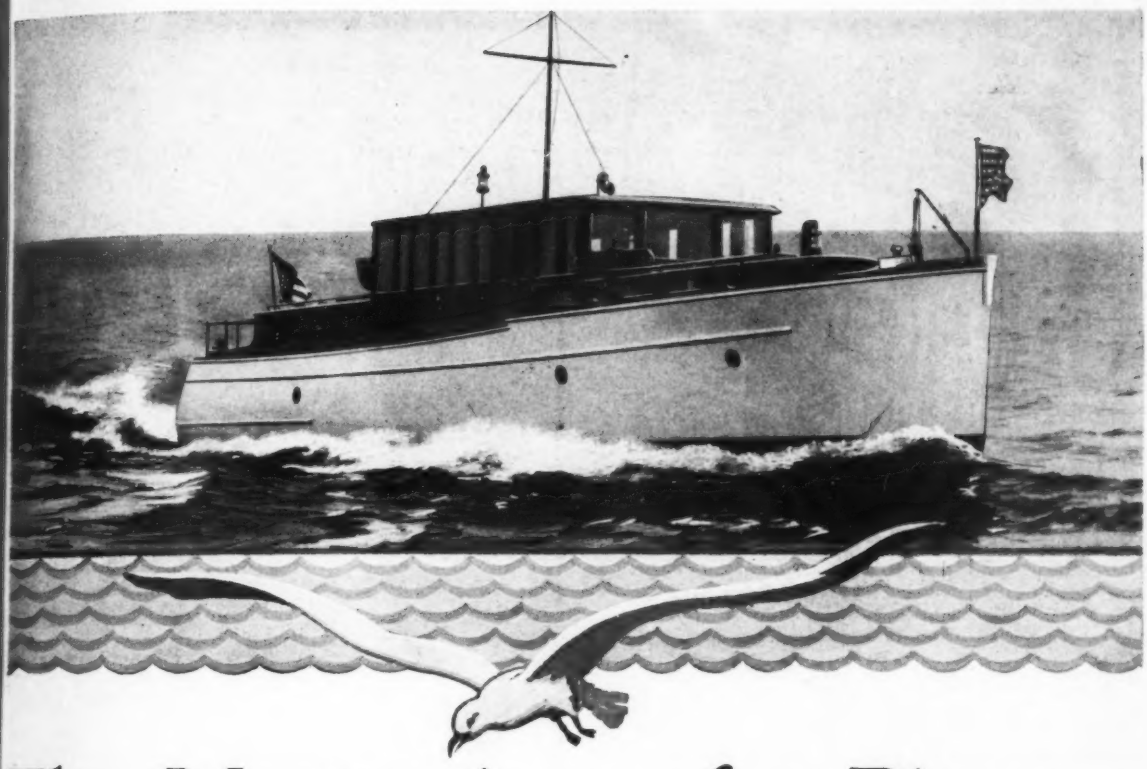

The Masterpiece of a Pioneer

YOUR pennant at the masthead of a Burger "46" would be a mark of good judgment, reflecting a keen discernment of cruiser values. You could proudly sail through any fleet afloat with the comfortable assurance that your boat would be equal to any and superior to most in beauty, luxuriousness, privacy, ease of handling and sturdy, all-weather seaworthiness. It is truly a masterpiece, exhibiting in every line and detail of construction the sixty-five years' experience of its builders.

You cannot know the best in 46-foot cruiser design and construction until you acquaint yourself thoroughly with the Burger "46". The coupon will bring you complete information, beautifully presented, replete with an abundance of captivating photographic views. Send the coupon and prepare for a thrill.

Imagine yourself lolling in the luxury of this cozy aft cabin of the Burger "46", fanned by the cooling breezes of lake or stream.

BURGER BOAT COMPANY, *Manitowoc, Wisconsin, U. S. A.*

BURGER

BOATS BEAUTIFUL

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Manitowoc, Wis. (MB-2)

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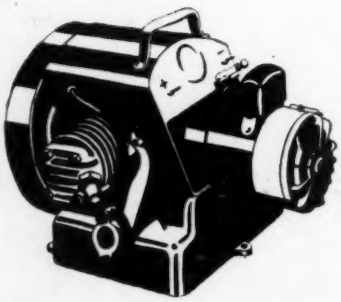
BRANFORD MIDGET LIGHTING PLANT

No matter how small the boat, it is possible to have a separate lighting plant«« The Branford Midget will supply plenty of electricity independent of the length of time the engine is run, and yet its' small size and light weight make it especially adaptable to small motor boats, sail boats and auxiliaries, commuters, work boats, and all other boats where space is limited «««« It is extremely simple to install, and may be connected to the starting battery, in which case, no other starting battery is required «««« It is supplied with six volt generator at 140 dollars, or with twelve volt generator at 145 dollars » » » »



MALLEABLE IRON FITTINGS CO

BRANFORD CONNECTICU

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Ludington Outboard Racing Craft have already won four of the most important events in the outstanding regattas of 1930 — Colonel Green Trophy; Albany - New York Marathon; National Championships, Worcester and Intercollegiate Gold Cup Regatta.

HERE ARE LUDINGTON WINNERS —

LIGHTNING A—11½ ft., for A Class, Div. 1 & 2; B & C Class, Div. 3, $240.

LIGHTNING B — 11½ ft., for B & C Class, Div. 1 & 2; D Class, Div. 3, $260.

FLASH — 14 ft., for D, E & F Class, Div. 1, 2, or 3, $310.

SPORTSHIP Specifications —

26 m.p.h. 17 feet in length. Beam 62". Freeboard forward 26". Freeboard aft 24". Sturdy single planked construction (easier to repair in case of accident). Quicker steering control by means of outboard drive unit. Genuine mahogany hull and decks. Frame—airplane spruce. Auto type steering wheel, lights, starter and ignition. All nickeled silver fittings. Equipped with cushions, life preservers, fenders, lines, flags, tools. Your Sportship is complete—ready to run!

ALL PRICES F. O. B. PHILADELPHIA

The Satisfaction Lies in Knowing You Own the Leading Value in Its Field—

The Ludington Sportship . . . $995

Like the pride of the horseman in his thorobred — the satisfaction of owning a Ludington Sportship is magnified by the fact that you own the leading value in its field!

Trim fast lines and 17 feet of gleaming mahogany hull, set off by bright nickeled-silver fittings, match the dash of the most expensive runabout. To test the performance of the Sportship, get 5 of your friends and stretch out in the dry forward cockpits. Watch the way the new rudderless outboard drive unit swings her out from the float at right angles, twists and turns her at will, revolves her in her own length — gives positive steering control at any speed ahead or astern. Then speed straight ahead and feel the quiet power of the sturdy Gray motor under the covered hatch aft!

She's completely equipped ready to run! The deferred payment plan gives you immediate ownership of either the Sportship or the Sportship Senior (with refinements of fittings and equipment at $1265). If you're interested in knowing more about the leading value in the field — send the coupon.

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BOAT DIVISION

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IT'S SMART
TO BE SALTY...
. . . and full of pep and sparkle! The breathless thrill of cutting through the crested waves . . . of seeing races and regattas as they should be seen . . . is yours in a SEA LYON.
Come into the SEA LYON Showroom or our City Island plant . . . let us take you for a trial spin . . . show you why 80% of SEA LYON owners have given up other boats to own one!
And you can have your boat for this season . . . the New York City plant gives you the advantage of immediate delivery!
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SEA LYON "35" . 2,975
SEA LYON "40" . 4,650
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SEA LYON "46" . 6,500
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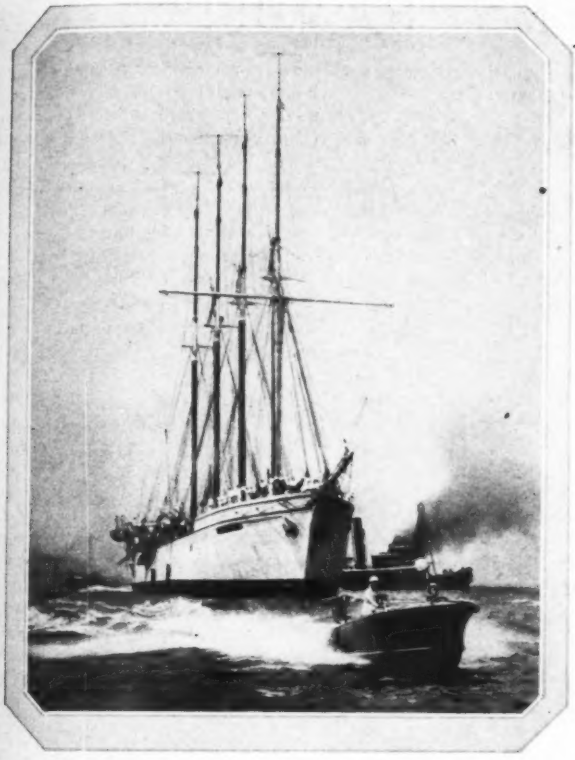

M. Rosenfeld

The schooner yacht Mopelia in the Hudson at the start of her two months cruise through the Caribbean with Gar Wood showing Count Von Luckner how to do 42 miles with 200 Scripps horsepower

MOTOR BOATING

FIFTY-SEVENTH STREET
AT EIGHTH AVENUE
NEW YORK, N. Y.

Edited by

CHARLES F. CHAPMAN

AUGUST, 1930

Vol. XLVI, No. 2

CONTENTS

COVER DESIGN BY WALTER BUEHR

LOOK AT MY HANDS - - - - - - - - - - - 24
CALENDAR OF COMING EVENTS - - - - - - - - - - - 26
WORLD OUTBOARD RECORDS - - - - - - - - - - - 28
CHARLES FRANCIS ADAMS - - - - - - - - - - - 30
AN AEGEAN CRUISE - - - - - - - - - - - 31–34
JOHN MASEFIELD WRITES FOR MOTOR BOATING - - - - - 35
KORANETTE, A COMFORTABLE CRUISING YACHT - - - - - 36–37
LAMORA, A DIESEL YACHT FOR THE LAKES - - - - - - - 38–39
THOUSANDS OF YACHTS CROWD THAMES RIVER AT NEW LONDON - - 40–41
INTERESTING HAPPENINGS IN THE BOATING WORLD BOTH NEAR AND FAR 42–43
INTERNATIONAL RACING CELEBRITIES - - - - - - - 44
FIFTEENTH HARMSWORTH RACE AT DETROIT - - - - - - 45
THE SEATTLE PRINCE RUPERT RACE - - - - - - - - 46–48
MAJOR SEGRAVE RECORD 98.76 MILES PER HOUR - - - - - 49
MADISON CELEBRATES THE FOURTH - - - - - - - - 50–51
FOURTEEN RACE TO BLOCK ISLAND - - - - - - - - 52
GOLD CUP PLANS LOOK BIG - - - - - - - - - 53
A DOUBLE CABIN FORTY-SIX - - - - - - - - - 54
LIGHTING THE SMALL CRUISER - - - - - - - - - 55–56
JUSTSO, 21 FEET OF ABLE RUNABOUT - - - - - - - 57
DRAGONFLY, A FOURTEEN FOOT RUNABOUT - - - - - - 58–59
SMALL MOTOR BOATS, THEIR CARE, CONSTRUCTION AND EQUIPMENT - 60–63
Prize Question 1—PRACTICAL METHODS FOR CUTTING RABBETS - 60–61
Prize Question 2—GETTING LINES TO A DISABLED BOAT - - 62–63
YARD AND SHOP - - - - - - - - - - - - - 64–66
OUTBOARD MOTOR BOATING CONTENTS - - - - - - - 151

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LOOK AT MY HANDS!

IN every fleet there is a woman who never does anything on her boat! She comes on board only when the last can of paint has been put in the locker and the last window of the windshield has been washed. The other, and harder working ladies, point her out to their respective Captains, pretending to envy her; but as a matter of fact they don't especially like her and wouldn't change places with her for anything.

Her only contribution toward getting the boat in shape is to drive down to the boat yard each evening for her husband, and,—worse luck—she usually brings a friend. As you become more and more conscious that you are sunburned, tired, and that where the dog left the imprint of his muddy paws hasn't improved your appearance at all, she bears down on you for introductions.

Its easy to see the friend isn't any more impressed with you than she was with several other ladies she has already met. She appears relieved when you make no effort to shake hands with her, since you are pretty well covered with green putty. She looks you over and is plainly astonished that anyone would let themselves get in such a state. You have an insane desire to puncture her superior attitude by explaining that the lady on the next boat, who is energetically stirring the copper paint, left a successful career as a singer, to marry the gentleman who is rolling on the ground and dividing, none too evenly, another can of copper between himself and a small cruiser. And what looks like a red headed little girl in dirty white ducks, is really an illustrator over whose sketches editors quarrel; and last of all, that you have a print dress as pretty as hers but you don't wear it painting the boat!

Of course you do nothing of the kind, but when the ladies have moved out of earshot you take it out on the Skipper.

"I don't see why it takes the whole family to get this old boat overboard! She never does anything on their boat and it always looks twice as good as ours. Look at my hands!"

If the Captains were honest, they'd have to admit that there is an excuse for the shortness of feminine temper in the Spring, but as a matter of fact none of them understand (or at least they pretend they don't) why their wives, sisters, and daughters aren't overjoyed when its time to get the boat in the water.

Every woman in a seagoing family dreads the night when the Skipper comes home later than usual and announces in an idiotically happy voice,

"I took the covers off the boat today."

It is the Skipper's big day. Hereafter every spare minute is devoted to rushing down to the boat, opening paint cans, and priming the old gasoline torch. One of the things I will never understand is the fondness all men have for this most horrible of tools. If ours got up and chased me around the boat some day, I wouldn't be astonished.

Much less enthusiastically, the feminine members of the crew gather up the rags they've been hoarding all winter, and order extra cans of scouring powder and disinfectant, yet you really can't blame them for cleaning the inside of any boat is very, very much like cleaning house.

So that first fatal morning that you arrive hot and dusty at the boatyard (all boat yards are at the end of hot and dusty roads) you know perfectly well that you've walked to your doom. Of course, you've walked, for the Skipper had to take the car, since he had the oars, and the paints, to say nothing about miscellaneous parts of the clutch, the magneto, the carburetor, and other odds and ends of the engine; which were brought home for winter repairs.

As you approach the boat you notice that it is about as dirty as you've ever seen it. When you've been welcomed, you climb a rickety ladder, placed precariously against the side of the boat. Inside the cockpit you close your eyes. You resolve to be prepared for a terrible looking place. You open them and look down the companionway, and realize that it couldn't be as bad as you imagined—it's worse.

Going inside you notice lots of things wrong. One of the best, flag trimmed glasses is half full of varnish, several dirty cups are about, a portlight is cracked, the linoleum seems to have had a lubricating oil bath and wiped up with a towel, bearing the ship's name embroidered on it. By a process of knocking your ankles on this and that you find that the engine is everywhere but in its bed.

But you recall that last year it was a pretty nice boat, and the thought cheers you, as you begin the hopeless looking task of cleaning up. As the tanks are dry, the first thing you have to do is to induce someone to get you lots of water. Every club has a hose that will extend to any part of the yard. That is, there was a hose like that last year, but it started to leak, and no money has been appropriated for a new one. So the Skipper has to carry the water and he grumbles louder than ever, when on his return he finds the torch dry.

Then you discover the stove you left so clean and shining is simply not lightable. The Skipper explains this by telling you that on those winter afternoons when he was "down looking at the boat" some of the boys came over and they made coffee.

When you get the stove clean enough to burn and the water heating you commence on the dish closet. This can only be reached by stepping over large parts of the engine and when you get there you discover that some of the dishes have been used and not too well washed. Evidently the boys again.

Also the Skipper thought the dish closet was a safe place for the spark plugs, for you find them stored in the cups. After gathering up the loose ones, you stick out your head and tell the Skipper some of the best dishes are missing. In a little while he comes aboard, with some of them in his hand, explaining that it doesn't hurt china to mix a little red lead in it and that he just kept nails in the little ones.

But you think, when you've packed the last clean and shining dish in place and admired the way you've scrubbed the shelves, at least there won't be much to do on the icebox; since you practically sterilized it last fall. However when you open the door, you find a doubtful looking can of milk, a long since inedible sandwich, an apple that has seen better days and a pair of pliers.

In a patient voice, the Skipper explains from somewhere under the boat, that the boys left them on board and he just stuck them in there. You're about to ask why the pliers, when you hear a terrific racket and realize that your dachshund is having a row with someone's airedale over a possible rat, and the Skipper rushes out to rescue them, and that's that.

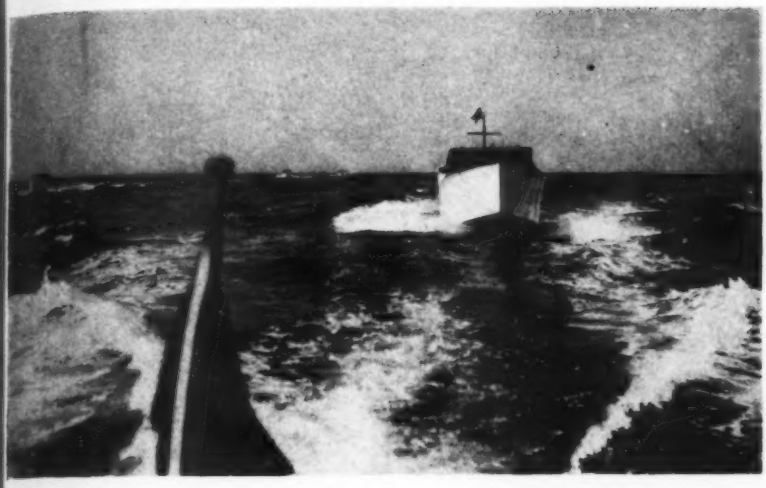
So it goes. In the clothes closet, you find some miscellaneous junk, the flywheel and some old, old clothing, which you gingerly pick up and put with the heap of stuff to be discarded. As soon as the Skipper comes aboard and sees them, he puts up a holla.

"Do you," he demands in an outraged voice, "expect me to paint the bottom of the boat in my white flannels? I saved this stuff just for that, and he rescues it lovingly and tucks it into one of his own lockers with an aggrieved air.

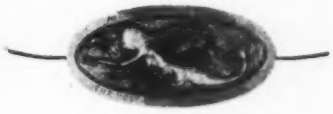
Anyway, he suggests, why not leave the inside go for a while and come outdoors. You can even help with a little puttying, he magnanimously offers, and

(*Continued on page* 84)

At Sea . . . . .



The Owner
Senses SECURITY
and
COMFORT
in a
FAIRFORM
FLYER



or In Port

New York to Newport
in a Forenoon
Boston to Bar Harbor
Between Breakfast and Dinner

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Speeds up to	32 - 26 - 27 - 29 - 30 M.P.H.

HUCKINS YACHT CORPORATION
JACKSONVILLE, FLORIDA

CALENDAR OF COMING EVENTS

Aug. 1—Tenth Annual Bayside-Block Island Auxiliary Handicap—Harry V. Spurr, 45 East 17th Street, N. Y. City.

August 1-3—Buffalo, N. Y. Regatta. A. C. Glasser, Sec'y, 122 Pearl St., Buffalo, N. Y.

Aug. 2—Detroit Recreation. Comm. Regatta, Belle Isle, Mich. Ivan Kirlin, Detroit Yacht Club, Detroit, Mich.

August 3—Beechhurst, N. Y., Outboard regatta, E. J. Biel, 160th Street and 12th Road, Beechhurst, N. Y.

August 8-9—Miles River Yacht Club, Wm. Haines, Medical Arts Buildings, 16th & Walnut Sts., Philadephia, Pa.

August 8-9—Miles River Yacht Club Miles River, Md. George Krill, St. Michaels, Md.

August 10—Camp Slocum, Kickamuit River, R. I.—E. V. Howe, 663 Thames St., Newport, R. I.

Aug. 12-13-14—New Bedford Yacht Club Race, Week for sailing craft. Geo. H. Sistan, 474 Park St., New Bedford, Mass.

Aug. 15—Boothbay Harbor, Maine. M. C. Welles, 8 Arlington St., Boston, Mass.

August 16-17—Gold Cup Regatta, Red Bank, N. J.—T. S. Field, 254 Fourth Ave., New York, N. Y.

August 20-30—Official Trial Races to select the defender of the America's Cup against the challenge of Sir Thomas Lipton.

Aug. 21-23—Lake Sunapee, N. H. D. D. Coffin, c/o C. H. Dexter & Sons, Windsor Locks, Conn.

Aug. 22-23—Seneca Lake Regatta. L. A. Taylor, Geneva Chamber of Commerce, Geneva, N. Y.

August 22-23—Third Annual Philadelphia Outboard Regatta on Schuylkill River for $6,000. Sir Thomas Lipton trophy.

August 23—Scripps reliability race to Put-In-Bay. I. M. Kirlin, 1240 Press Building, Detroit, Mich.

Aug. 23-24—Greenwood Lake, N. Y. J. L. Holt, 53 Park Place, New York City.

August 24—Lake Winneconnet, Taunton, Mass.—E. V. Howe, 663 Thames St., Newport, R. I.

Aug. 24—Annual Ocean Race, Sheepshead Bay Yacht Club. 45 nautical miles. W. J. Copplestone, Sheepshead Bay Yacht Club, Sheepshead Bay, N. Y.

August 29-September 1—Harmsworth Trophy race, Detroit, Mich.—W. D. Edenburn, General Motors Bldg., Detroit, Mich.

August 29-30—Havre de Grace, Maryland. Havre de Grace Yacht Club, Havre de Grace, Md.

August 30-September 1, United States Power Squadrons. Rendezvous, Hamburg Cove, Connecticut River.

Aug. 31-Sept. 1—Rhode Island Yacht Club, Providence, R. I. E. V. Howe, 663 Thames St., Newport, R. I.

September 1—Lake Marion, Minn. Northwest Speed Boat Association. 2422 Penn Ave. No., Minneapolis, Minn.

September 5-6—Middletown, Conn. Intersectional Outboard Championship.

September 6-7—Cincinnati, Ohio—E. C. McHugh, Times Star Bldg., Cincinnati, Ohio.

September 6-7—Cruising Club of America. Auxiliary cruising race. Schuyler Dillon, 131 State St., Boston, Mass.

September 7—Westerly Boat Club, Westerly, R. I.—E. V. Howe, 663 Thames St., Newport, R. I.

Sept. 8-9—Lake Merritt, Oakland, Calif. A. L. Bobrick, 111 Garey St., Los Angeles, Calif.

September 12-13—Cruising Club of America rendezvous, Block Island. Schuyler Dillon, 131 State St., Boston, Mass.

September 13—Races for the America's Cup. American defender and Sir Thomas Lipton's Shamrock V.

Oct. 11-13—National Outboard Championship, Middletown, Conn. E. McNulty, Middletown, Conn.

RACING IN EUROPE

Union Internationale de Yachting Automobile

August 3—Sweden, Stockholm. All classes.

Aug. 14-24—Belgium International Meeting, Antwerp, Ostend, Liege, Belgium.

September 18-22—Italy, Venice. All classes.

DELAWARE RIVER EVENTS

Delaware River Yachtsmen's League

August 2-10—Annual Chesapeake Bay Cruise of Riverside Yacht Club.

August 16-17—Canoe championships of Eastern Canoe Association, and Outboard and Speedboat Regatta, of Anchor Yacht Club, Bristol, Pa.

August 23—Annual Class Race to Trenton, starting 2 P. M. from Keystone Y. C., distance 25 n.m., finishing Trenton Y. C.

SOUTH JERSEY EVENTS

Martin N. Fritsch, Box 325, Mays Landing, N. J.

August 2—Port Norris, N. J.
August 3—Avalon, N. J.
August 9-10—Stone Harbor, N. J.
August 16—Brigantine, N. J.
August 23—Ocean City, N. J.
August 30—Margate Longport, N. J.
September 1—Lower Bark, N. J.
September 6—Mays Landing, N. J.

CALIFORNIA REGATTAS

A. L. Bobrick

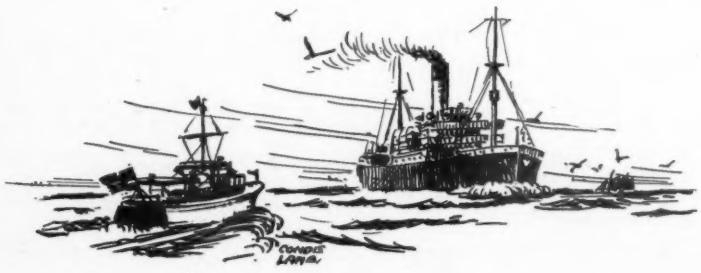
111 Garey St., Los Angeles, Calif.

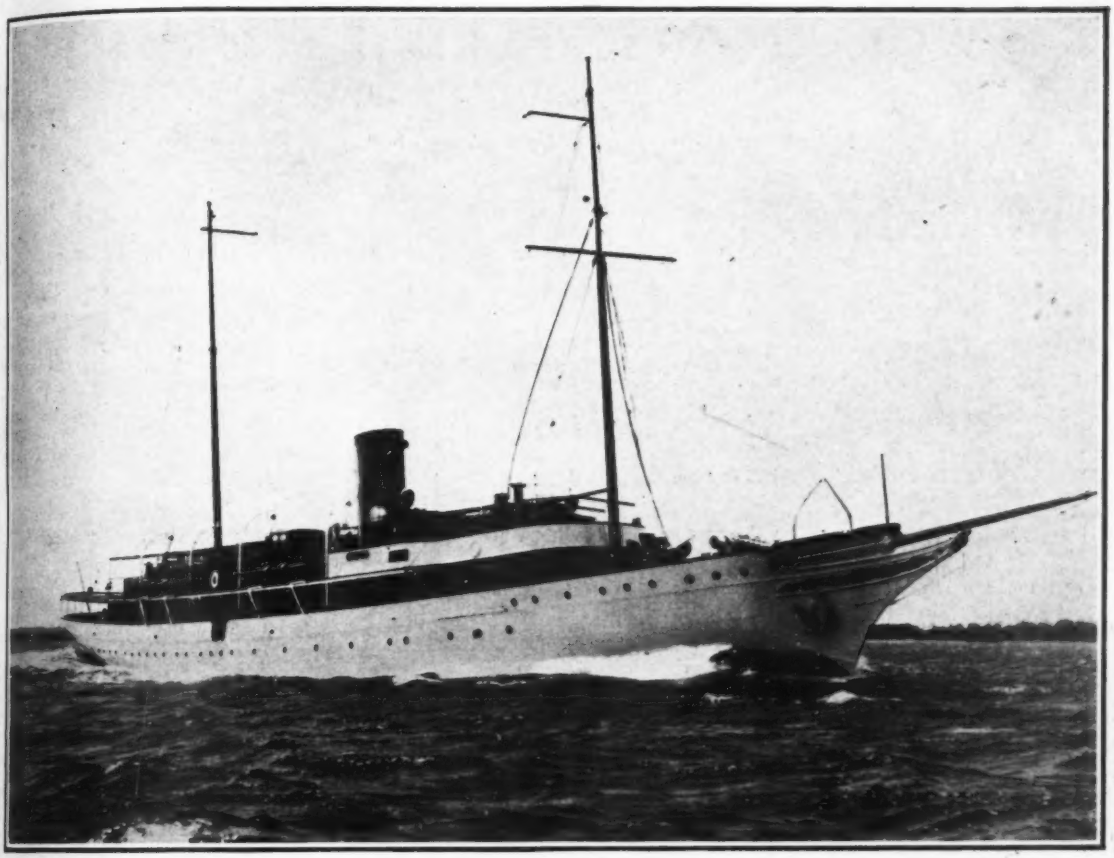
August 10—Balboa, Calif.
September 9—Admission Day—Lake Merritt, Oakland, Calif.
November 29—Salton Sea, Calif.
December 6-7—Lake Elsinore, Calif.

ADIRONDACK REGATTA CIRCUIT

H. C. Eckert, Box 208, Saranac Lake, N. Y.

Aug. 2—Long Lake Boat Club.
Aug. 2-3—Iroquois Yacht Club, Lachine, Quebec.
Aug. 5—Tupper Lake Speed Boat Club.
Aug. 8-9—Saranac Lake & Waterway Club.
Aug. 11—Lake Placid Boat Club.
Aug. 13-14—Rouses Point Boat Club.
Aug. 16-17—Westport Yacht Club.
Aug. 20—Newport, Vermont, under auspices of Newport International Boat Club.
Aug. 21—Second Annual Newport, Vermont, Regatta.





WINTON

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WINTON ENGINE CORPORATION
CLEVELAND, OHIO, U. S. A.

WORLD OUTBOARD RECORDS

JULY 15, 1930

ONE MILE

Class & Div.	Speed MPH.	Name of Boat	Driver	Motor	Boat	Place of Race	Date
A-I	*27.85	Blue Streak	Margaret Mullin	Lockwood	Elsinore	Balboa, Calif	Dec. 4, 19
A-I	27.622	Misstep	B. Steacie	Lockwood	C. W. Crandall	Worcester, Mass.	May 29, 19
A-II	*28.4	Blue Streak	Chuck Hall	Lockwood	Elsinore	Balboa, Calif.	Dec. 4, 19
B-I	(N)*41.613	Baby Brontosaurus	Billy Lyon	Johnson	Crandall	Newport Beach, Cal.	Oct. 7, 19
B-I	*43.974	Baby Brontosaurus	Billy Lyon	Johnson	Crandall	Balboa, Calif.	Dec. 4, 19
B-II	41.666		C. Holt	Johnson	Crandall	Stockton, Calif.	May 30, 19
B-II	(N)41.472	Salome	A. G. Martin	Johnson	Pierce	Newport Beach, Cal.	Oct. 7, 19
B-II	*43.94	Crandall Comet	Charles Holt	Johnson	Crandall	Balboa, Calif.	Dec. 4, 19
C-I	(N)*39.15	Bossert Pirate	W. Peterssen	Evinrude	Bossert	Albany, N. Y.	July 5, 19
C-I	*43.711	Black Maria V	Mildred Milde	Evinrude	A. Thomson	Newport Beach, Cal.	Oct. 7, 19
C-II	(N)*42.617	Black Maria V	Al Thomson	Evinrude	Thomson	Newport Beach, Cal.	Oct. 7, 19
C-II	44.776	Blue Streak	H. Ferguson	Johnson	Elsinore	Stockton, Calif.	May 30, 19
C-III	44.355	Birmala	G. Cost	Johnson	Indian	Madison, Ind.	July 4, 19
D-I	(N)*43.80	Big Ben	Harold Chapman	Johnson	Hallock	Albany, N. Y.	July 5, 19
D-I	43.689	Sleepy	F Anderson	Johnson	Wilber	Stockton, Calif.	May 30, 19
D-I	*47.15	Crandall Comet	Billy Lyon	Johnson	Crandall	Balboa, Calif.	Dec. 4, 19
D-II	(N)*47.728	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Newport Beach, Cal.	Oct. 7, 19
D-II	46.512	Blue Streak	H. Ferguson	Johnson	Elsinore	Stockton, Calif.	May 30, 19
D-II	*49.48	Crandall Comet	H. G. Ferguson	Johnson	Crandall	Balboa, Calif.	Dec. 4, 19
D-III	45.973	Baby Whale	Ross Maddocks	Johnson	Kelley	Worcester, Mass.	May 31, 19
E-II	37.735		C. Livingston	Elto	Cowden	Stockton, Calif.	May 30, 19
E-II	*39.353	Wildcat	F. E. Ludolph	Elto	Hooton	Peoria, Ill.	Oct. 15, 19
F-III	47.876	Baby Whale	Ross Maddocks	Evinrude	Kelley	Worcester, Mass.	May 31, 19

(N) Indicates record made on nautical mile course, not allowed in 1930.

FIVE MILES

A-I	28.310	Lady Luck	B. Reinell	Lockwood	Adams & Reinell	American Lake, Cal.	June 29, 19
A-II	25.824	Oh Oh	N. Kalat	Lockwood	Padula	Worcester, Mass.	May 29, 19
B-I	37.267	Spencer Special	E. Spencer	Johnson	Spencer	Worcester, Mass.	May 30, 19
B-II	38.626	Firefly	Charles Holt	Johnson	Crandall	Lake Elsinore, Cal.	May 18, 19
B-II	*40.43	Ohkay	H. G. Ferguson	Johnson	Elsinore	Peoria, Ill.	Oct. 15, 19
B-III	35.643	Miss Berkshire	K. Garrett	Johnson	Porteus	Albany, N. Y.	July 4, 19
C-I	41.095	Irish Luck	D. Sullivan	Johnson	Gustafsen	Lucerne, Calif.	July 5, 19
C-I	39.30	Trio	E. Waugh	Evinrude	Elsinore	Lake Elsinore, Cal.	April 6, 19
C-II	41.958	Flying Cloud	H. L. Arnold	Johnson	Sulmock	Lucerne, Calif.	July 5, 19
C-II	*42.35	Blue Streak	H. G. Ferguson	Evinrude	Elsinore	Salton Sea, Calif.	Dec. 15, 19
C-III	42.056	Birmala	G. Cost	Johnson	Indian	Madison, Ind.	July 4, 19
D-I	41.783	Deke	S. Nunnelley	Johnson	Brobeil	Skaneateles, N. Y.	May 16, 19
D-II	*45.34	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Salton Sea, Calif.	Dec. 15, 19
D-II	43.165	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Lake Elsinore, Cal.	April 6, 19
D-III	42.155		G. Pauli	Johnson	Century	Albany, N. Y.	July 5, 19
E-I	*34.82	Thoroughb'd Baby	Col. S. Tooey	Johnson	Fay & Bowen	Boston, Mass.	Oct. 5, 19
E-II	*40.36	Ludington	J. Dunnell	Johnson	Ludington	Worcester, Mass.	May 30, 19
F-I	37.113		W. Harris	Johnson		Westerly, R. I.	July 4, 19
F-II	41.763	Flying Ellen	W. Crawford	Johnson	Penn Yan	Albany, N. Y.	July 5, 19
F-III	42.115	Pauli's Cyclone	G. Pauli	Johnson	Century	Albany, N. Y.	July 4, 19

SIX MILES
(See Note 1.)

B-I	*34.269	Crandall Comet	Charles Adams	Johnson	Crandall	Newport Beach, Cal.	Oct. 27, 19
B-II	*40.54	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Lake Elsinore, Cal.	May 28, 19
C-I	*37.75	Blue Streak IV	Chuck Hall	Johnson	Elsinore	Lake Elsinore, Cal.	May 28, 19
C-II	*40.63	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Lake Elsinore, Cal.	May 28, 19
D-II	*43.584	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Newport Beach, Cal.	Oct. 27, 19
E-I	*40.227	Ceestepper	L. E. Preston	Johnson	Penn Yan	Red Bank, N. J.	Aug. 27, 19

TEN MILES

B-I	36.182	Flying Cloud II	Harry Arnold	Johnson	Sulmock	Lake Merritt, Cal.	Jan. 1, 19
B-II	*38.83	Crandall Comet	Charles Holt	Johnson	Crandall	Salton Sea, Calif.	Dec. 15, 19
C-I	*40.089	Miss Genn III	R. Cunnells	Evinrude	A. Smith	White Rock, Texas.	Sept. 8, 19
C-II	41.360	Windy	Roy Craig	Johnson	Connor	Sammamish Lake, Wash.	June 14, 19
D-I	*47.36	I'm Alone	E. Widegren	Johnson	Kelley	Oyster Bay, N. Y.	Sept. 29, 19
D-II	*44.12	Blue Streak IV	H. G. Ferguson	Johnson	Elsinore	Lake Elsinore, Cal.	Sept. 22, 19
D-II	40.54	Sleepy	F. Anderson	Johnson	Wilber	Sacramento, Calif.	Mar. 30, 19
E-II	*40.36	Miss Mystery	L. F. Davids	Johnson	Fay & Bowen	Boston, Mass.	Oct. 5, 19

FIFTEEN MILES
(See Note 1.)

B-I	*37.383	Crandall Comet	Charles Adams	Johnson	Crandall	Newport Beach, Cal.	Oct. 27, 19
B-II	*40.40	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Lake Elsinore, Cal.	July 28, 19
C-I	*35.785	Vagabond	B. A. Wheeler	Evinrude	Elsinore	Newport Beach, Cal.	Oct. 27, 19
C-II	*40.31	Blue Streak IV	H. G. Ferguson	Johnson	Elsinore	Lake Elsinore, Cal.	July 28, 19
D-II	*44.92	Blue Streak	H. G. Ferguson	Johnson	Elsinore	Salton Sea, Calif.	Dec. 15, 19

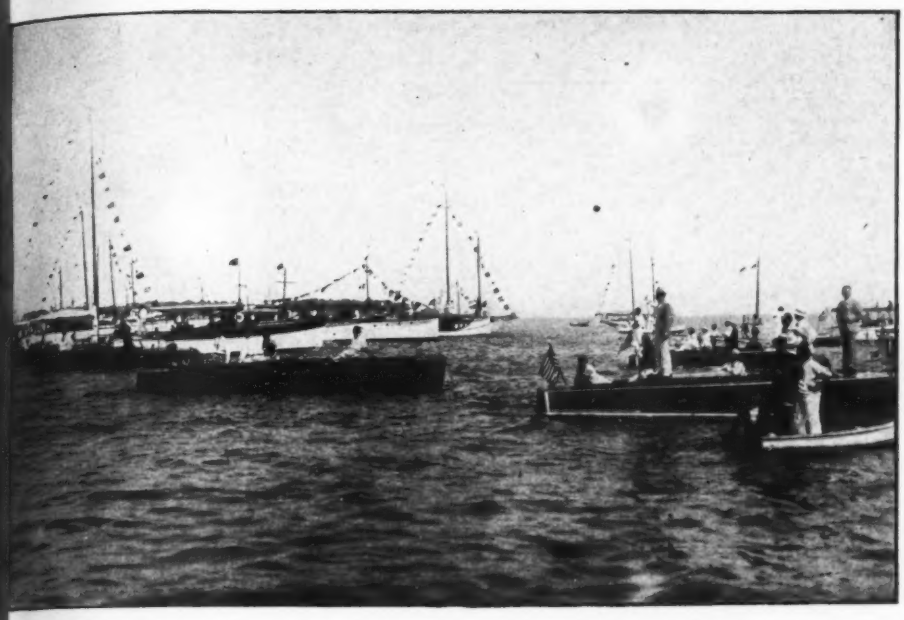
*Record made under old rules with no restrictions on boat weights. These records to stand until December 31, 1930 unless broken by boats racing under 1930 rules.

Note 1.—Six and 15-mile records no longer permitted. These records to stand until December 31, 1930.

Records are allowed as follows: In Division I, 1 mile and 5 miles, Classes A, B, C, D, E and F; in Division II and III, 1 mile, 5 miles and 10 miles, Classes A, B, C, D, E and F. All records must be made at a regatta sanctioned by the American Power Boat Association or Mississippi Valley Power Boat Association approved by a National Outboard Referee and at least one member of the National Outboard Racing Commission. Records must be made on a one mile or a 2½-mile course. Only stock motors may be used and no one connected with the outboard industry will be awarded a record.

National Outboard Championships will be decided in 1930 at Middletown, Connecticut, on October 11, 12 and 13. Events will be held in Division II and Division III, Classes A, B, C, D, E and F.

The members of the National Outboard Racing Commission are as follows: C. F. Chapman, 959 Eighth Avenue, New York N. Y.; A. L. Bobrick, 111 So. Garey St., Los Angeles, Calif.; George O. Hoehn, 201 North Wells St., Chicago, Ill.; A. T. Gri... Hippodrome Bldg., Peoria, Ill; Ray Lechenger, Post Dispatch Bldg., Houston, Texas.



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M. Rosenfeld

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CHARLES FRANCIS ADAMS

AUGUST MOTOR BOATING 1930

Hotspur anchored off the custom house at Piraeus

AN AEGEAN CRUISE

Hotspur Arrives by Steamer in Piraeus, Greece, and Commences Her Adventures in Historic Waters—Proof Offered that in Some Cases Ignorance is Wisdom

By ALFRED F. LOOMIS

Author of The Cruise of the Hippocampus, Fair Winds in the Far Baltic, etc.

PART I

STAVROS spoke no English at all, while Yorgho's command of the language was limited to such essentials as all right, yes, no, and a Christian seaman's oaths. But these two stevedores, of the horde which cluttered the deck of Hotspur after she had been launched from the hold of the steamer, remained on board as self-appointed riggers. So when the proper time came to ship Hotspur's bowsprit and secure the brass rod which passes through it to the stempiece I wedged myself into the narrow and exceedingly hot forepeak, Stavros remained topside, and Yorghio hovered kind of 'twixt and between to interpret for me.

"Turn right," said I, wiping gallons of perspiration

As Hotspur entered the canal we were warned not to come too close to the steamer ahead of us. And we didn't

from my forehead. Yorghio said something at great length which sounded very much like Greek to me, and Yorghio turned the rod to the left.

"No, no, no," I shouted. "Turn right."

"All right," said Yorghio and added a few more paragraphs in Greek. And Stavros went on turning left.

Suddenly it occurred to me that when a Greek says nay nay and shakes his head he means yes, and I wondered whether right and left might not have opposite significance in the Greek tongue. So I resorted to the language of signs, which works in all countries, shoved Yorghio into the stifling forepeak by the heels, showed him the brass rod with the right-hand thread, and told him to go to it. Then, because I had torn my best trousers in two places, I took them off and changed to an old pair which never tear, and after Stavros and Yorghio had twisted and hammered and shouted and sweat for a few minutes, I shooed them away, examined the end of the brass rod and found they had hopelessly mutilated the thread. So I got out Hotspur's hacksaw and vise, sawed off the tip of the rod, told Stavros and Yorghio to stand just so and not move until I gave them permission, and shortly threaded the rod into the socket and that job was done.

By the time the last of the shrouds was coupled to the chainplates and all the halliards were disentangled from one another, I was speaking Greek like a native and Yorghio had forgotten his English. Getting the mast into place, however, was the job that turned my hair white in a single hour. This happened before I had been aboard Hotspur half an hour in her Grecian experience, and after Mr. Harrison had told me that the Greeks could not unload an uninflated automobile tire from a steamer without puncturing it.

Hotspur lay alongside the freighter Excelsior, other steamers and various tugs barged in and about, causing the little cutter to rub and chafe and exchange green paint for red lead. I looked up, and saw the mast descending rapidly at an angle of fifteen degrees from the perpendicular. I dropped below while Harrison (who will be introduced shortly) and the stevedores guided the butt of the mast through the deck opening. It straightened out a clothes hook, bent the copper wash basin, and came to rest heavily on the toilet.

Even the rowboats in Greece are fitted with the lateen rig, which is effective in that one big sail combines mainsail and jib. The most modern experimentalists in the science of sailing are now doing the same thing

The cutter Hotspur just after being unloaded from the hold of the steamer Excelsior in Piraeus

I rushed out on deck. "Who's bossing this job?" I asked of the crowd of sailors and stevedores who lined Excelsior's side. "That's the trouble in Piraeus," said Harrison; "they're all bossing it."

"Well," I cried to the world at large, "you can't bend the mast into place, or twist the boat to fit it. You've got to lower the cargo boom until the mast is over the boat before we do anything."

So a great deal of Greek and English and composite profanity took place, and finally by a miracle which I don't yet comprehend, the mast was brought to the perpendicular, lowered gently into its step, and the danger of ruining the Grecian cruise at the outset was obviated. By evening of the same day Hotspur was looking like herself—a 32-foot auxiliary cruising cutter, rigged and ready for her passage.

I can leave her anchored stern on off the custom-house wharf at Piraeus while explaining how she came to be there and what Mrs. Loomis and I plan to do with her. Three years ago, as a few readers of MoToR BoatinG may remember, we cruised with Paul Squibb and Major Nott in his schooner Lucette from England to Stockholm and return. That was a good cruise, and our experiences were all on the pleasant side—but it had a certain drawback. Anthony, one of the paid hands, expressed it one high noon off the Baltic island of Bornholm when he remarked, "Why, it's at least two coats warmer down here than it was in Stockholm." And even then Anthony was one coat and two flannel undershirts removed from being indelicately nude. Yes, it was cold that summer in the Baltic, and if there's one thing P. L. and I pine for in cruising it's hot weather.

So we cast our eye over the map of Europe and I recalled that it had been hot at Corfu with the sub-chasers during the war, and P. L. said, "Let's cruise next time in the Grecian archipelago." Hotspur was designed by Linton Rigg and built by Casey Baldwin, and when we tried her out last summer and found her quite the ablest little packet that we had ever seen we made the decision to ship her to Greece by steamer and cruise in the Aegean for seven weeks. To friends who asked if we had selected Greece as

Leaving the busy harbor of Piraeus, we passed close to a native kaiki, her lateen yard square to an overtaking wind

A kaiki laden with iron lying at the eastern entrance of the Corinth Canal. Her waist has such little freeboard that canvas dodgers are used to keep the wave crests out

a cruising ground because of its antiquities we replied, "No, because of the heat." To others who thought that shipping a sailboat quarter around the world was a bit ridiculous we demonstrated that it can be done easily, safely, and no more expensively than chartering a boat by the month. The comfort and delight of cruising in one's own boat need only be mentioned to be appreciated.

At the outset the difficulties did seem rather onerous. First, being ignorant of shipping matters, I had to find a freight line serving Greek ports. This I discovered to be the American Export Line with monthly sailings from New York to Piraeus. Then with bated breath I inquired the freight rate for short-ended, self-contained little cutters like Hotspur. This, alas, was the greatest fly in the ointment—$20 a linear foot, which, multiplied by 32 feet 3 inches, comes to $645. But by that time our minds were made up, and we took the children off candy and peanuts for a month and pocketed the savings. The third most important step was a visit to the Greek consulate at New York to inquire whether small sail or motor boats (Hotspur can classify as either according to convenience) would be received in Piraeus without customs formalities, bonds, or the like. I was assured that we would be admitted duty free if the boat were destined to be returned to the States.

After that, everything was simple. Last October passage for Hotspur was reserved for the May fifth sailing. The cutter was left afloat late enough in the fall to assure her being launched first in the spring. P. L. and I passed the long winter evenings intending to read ancient Greek history and learn the modern Greek language—and doing everything else but. With the coming of April I definitely knocked off work with the typewriter and devoted my days to fitting out Hotspur and putting stores aboard. Her sail area had been reduced during the winter by shortening the foot two feet and the luff one foot, and she had to be completely commissioned so that we could observe her performance under the shortened rig. To my delight I learned that while still possessing a weather helm, she had gained in stiffness without suffering loss of speed on the wind.

I had never become thoroughly acquainted with the Falcon motor in a season's use, and so had an expert mechanic spend a day with it to make sure that it was in perfect running condition. He had the bad luck to come on a morning after a heavy rain when the hatch had been left open and the ignition was thoroughly soaked. He spent the whole morning failing to start the motor, but finally a half hour of hot sun shining down the hatch dried the wires and the expert assured me I should have no further trouble. But I added a day on my own account (when new wires had been installed) and at the end of that day felt convinced that I had said goodbye to motor troubles arising from ignorance.

When May fifth rolled around Hotspur was ready and waiting alongside the steamer Excelsior at her wharf in Brooklyn. First her mast was plucked out and then she was picked up by a derrick barge of the Merrit-Chapman company, most expertly lowered by Captain Hansen, superintendent of the company, and fitted into a forward hold with exactly three inches clearance through the hatch at bow and stern. There in her demountable cradle she was chocked up and lashed down, and it wasn't until twenty-one days later that she began to lose shreds of her pristine green paint. At that, her hull isn't injured a drachma's worth, and she floats as sweetly in the blue water of the Aegean Sea as ever she did in Long Island Sound.

The pros and cons of shipping or chartering may as well be interpolated at this point. Mr. L. D. Harrison, previously mentioned, is an English yacht broker with offices in the *(Continued on page 63)*

ENGLAND LOVES A SAILOR

When I was a lad I made a trip
As cabin boy on a sailing ship.
I holystoned the scuppers fore and aft
And polished up the ratlines till the captain laughed.
I polished those lines so adequate
That now I am the English poet laureate.

So land bards all, whoever you may be,
Pack up your inkwells and go to sea.
It may be wet and it may be rough,
But England loves a sailor who does his stuff.
Polish up your lines both long and late,
And you all may be English poets laureate.

John Masefield in the N. Y. Times.

Photograph © Pacific & Atlantic, Ltd.

John Masefield, Poet Laureate of England

JOHN MASEFIELD WRITES FOR MOTOR BOATING

Series of Articles by the Poet Laureate of England to Begin in the September Issue

ENGLAND has chosen a sailor for her Poet Laureate, John Masefield, who started in the training ship Conway when fourteen years old. Then began his experiences that have so vividly buried themselves into the memory of the restless youth. For several years he sailed the seas aboard merchantmen to many parts of the world, visiting interesting lands, always storing up impressions that later were to be told to the world in his prose and verse. Recently the King has appointed Mr. Masefield his Poet Laureate.

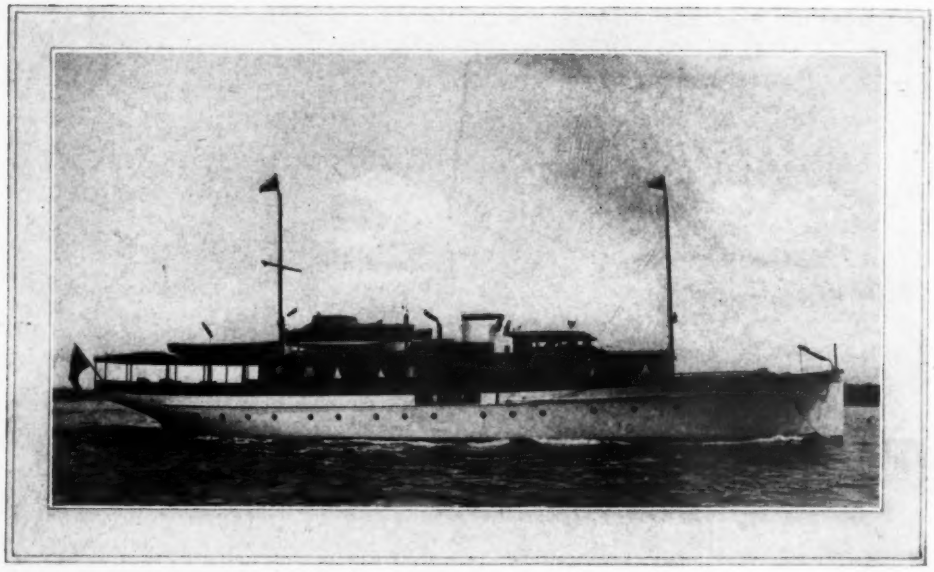
During his time at sea, John Masefield, had little opportunity to read or write, so he left the service when he landed in New York in April, 1895, at the age of seventeen, with five dollars as his worldly wealth. Greenwich Village and Yonkers both claimed him for awhile.

Mr. Masefield does not write only of the sea, but he did and still does. One of his latest yarns in prose and verse is called "The Wanderer of Liverpool." This story is to appear serially in MoToR BoatinG beginning with our next issue.

Wanderer, the subject of Mr. Masefield's story, a four masted bark, was laid down in August, 1890, her official dimensions being length 309 feet, beam 46 feet, depth 25.8 feet.

As Mr. Masefield himself says, "For some years men had been building big sailing ships which could compete with steamers, as carriers of freight, in the longer voyages, to the West Coast of both Americas, and to Australia. These big sailing ships were sometimes three masted full-rigged ships, so heavily rigged that they were difficult to handle; sometimes four-masted full-rigged ships, beautiful to the eye but expensive to run and not easy to work; and sometimes they were four-masted barques. The tendency of the time was towards the barque rig, for many practical reasons, and by 1890 most sailing vessels of over 2,000 tons were rigged as four-masted barques. Sailing vessels of more than 2,500 tons were still rare and being experimental vessels, the experiment was being tried to build them with a central bridge or living-house amidships, stretching right across the main deck just abaft the mainmast and reaching aft for some fifteen yards. Inside this structure, all hands were housed. Often the ship was steered from a charthouse above the structure."

Mr. Masefield's story *(Continued on page 100)*



M. Rosenfeld

Koranette gives one the impression of a much larger boat

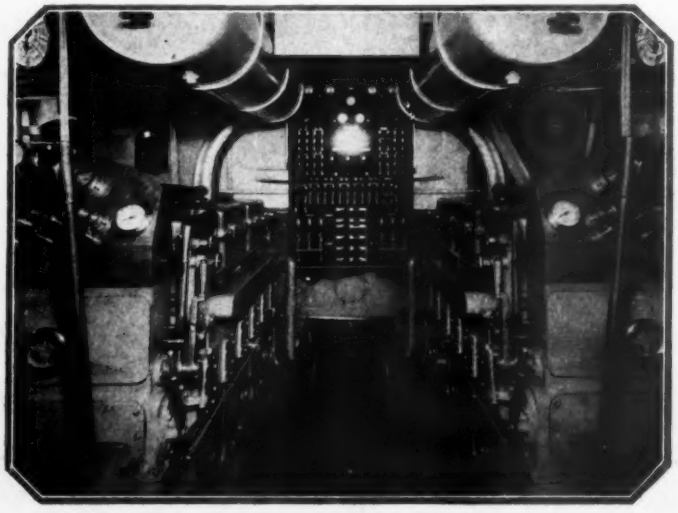
KORANETTE - A COMFORTABLE YACHT

Splendid Twin Screw Diesel Craft Delivered by Luders to Commodore F. B. Hower of Buffalo

ONE of the most attractive yachts turned out this spring is the 105 foot twin screw Winton Diesel Koranette designed and recently completed by the Luders Marine Construction Company of Stamford, Connecticut, for Commodore F. B. Hower of Buffalo, N. Y.

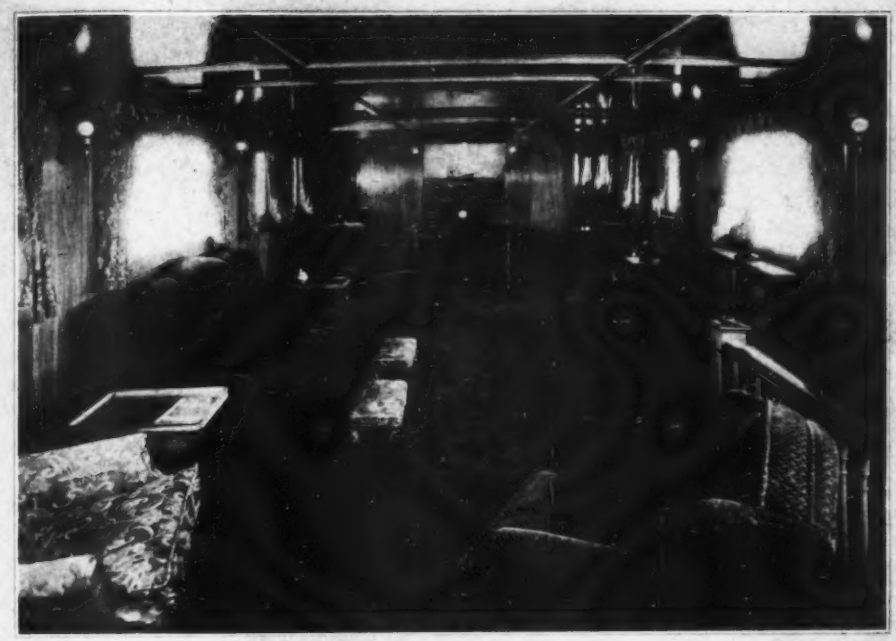
Koranette is the outstanding boat of a long list of yachts that have been owned by this Great Lakes yachtsman, and the Commodore's years of yachting experience and his specific knowledge of the needs of the man afloat have been cleverly worked into this boat by her design.

Koranette is 105-ft. overall, 20-ft. beam and draws about 6-ft. of water. In addition to this, there was the stipulation that the pilot house must not be more than 15 feet high in order to pass comfortably under the bridges of the New York State Barge Canal. In order to obtain this reduced height, the deck-house and wheel-house have been carefully stream-lined in order to meet this condition and incidentally enhance the general appearance of the boat.



Her twin 8 x 10-inch Winton Diesels will provide a cruising speed of 12 knots

Koranette under way rather gives the impression of a 120 footer and at the same time impresses as being a very powerful craft. She is built of wood of the best material and workmanship, embodying oak, teak, African mahogany and American walnut. The keel, stem and stern frame are of oak, bronze bolted together and the frames throughout are a natural sweep of tough Connecticut oak in two thicknesses bolted together and spaced 12 to 15 inches apart. The



The social hall at the after end of the deckhouse is panelled in selected American walnut

planking is of double thickness, vertical grain Oregon fir in excess of 2" in thickness and the interior of the boat is carefully reinforced to compensate for port holes and is adequately braced by no less than five watertight steel bulkheads.

There are two Winton Diesel engines of the latest model 6 cylinder 8 by 10 inch bore and stroke which at 650 revolutions give the boat a cruising speed of better than 12 knots. There is a fuel capacity of 2,000 gallons and a fresh water capacity of the same amount.

The engine room is up to date in every respect and contains the auxiliaries for furnishing hot and cold running water,

(*Continued on page* 108)

The pleasing effect of mahogany and white has been retained in decorating the owner's quarters

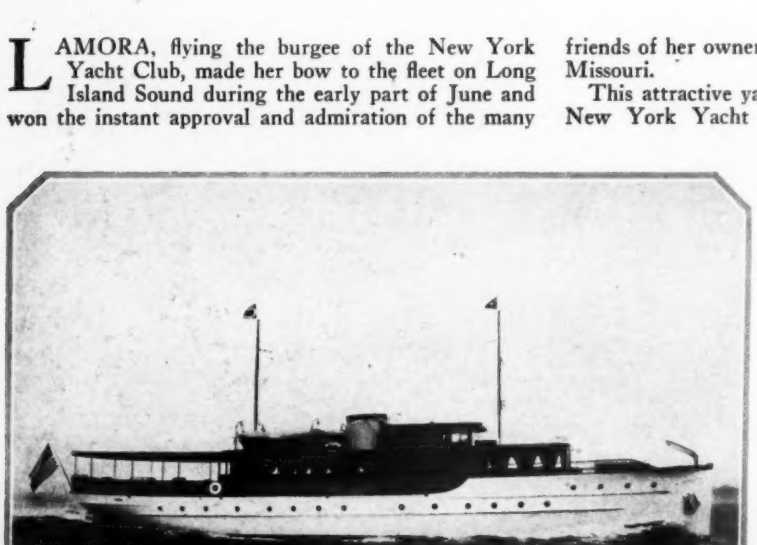
A large party may find relaxation on the spacious after deck

LAMORA—A DIESEL YACHT FOR THE LAKES

New York Yacht Launch and Engine Company Builds a Trim 92-Footer for H. L. Gary, Western Yachtsman

LAMORA, flying the burgee of the New York Yacht Club, made her bow to the fleet on Long Island Sound during the early part of June and won the instant approval and admiration of the many friends of her owner, Hunter L. Gary of Kansas City, Missouri.

This attractive yacht was designed and built by the New York Yacht Launch & Engine Company of Morris Heights, New York City, who have succeeded in producing a craft of noteworthy capabilities. Lamora's principal dimensions are: 92 feet overall length, 18 feet beam and 5 feet, 6 inches draft, which proportions combined with a most sturdy construction have resulted in a vessel of exceptional seagoing qualities as well as generous accommodations with comfortable quarters for both owner and crew.



Lamora's twin diesels drive her 14½ m.p.h.

Lamora is a twin-screw diesel yacht, power being supplied by a pair of 200 horsepower, 6-cylinder, 8-inch bore by 10-inch stroke Winton diesel motors which develop a speed of 14½ miles per hour.

Lamora has accommodations for six of the owner's party,

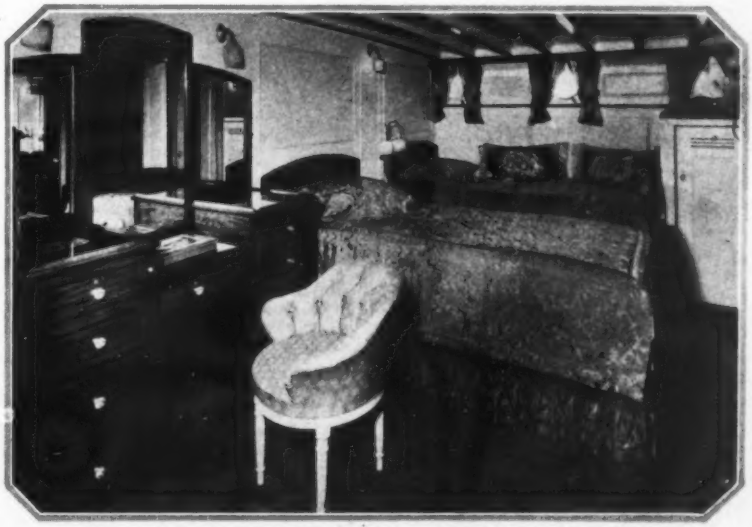
Photographs by M. Rosenfeld

In bad weather, owner and guests may retire to the comfort of the enclosed lounge

there being two double and two single staterooms and three bathrooms. The dining room is located in the forward deckhouse and the lounge is in the aft deckhouse, which is connected with the quarters below. It is difficult to express in words the wonderful results that have been obtained as a result of co-operation in planning and execution between builder and owner to produce a job of finishing and decorating the interiors that measures up to the very highest standard. Mrs. Gary selected and passed upon all of the furnishings, and while the photographer has brought out all of the good features, a visit to the yacht impresses one with the care that was used to blend the color schemes, furniture and other appointments in such a manner as to make the yacht a comfortable, livable and enjoyable craft.

Mechanical equipment aboard the yacht is most complete and modern in all respects. An R.C.A. wireless sending and receiving set has been installed for communication with the shore and automatic intercommunicating telephone systems have been provided between rooms. A Fridigaire-equipped refrigerator as well as a separate Frigidaire ice-making box have been supplied and the boat is hot water heated by means of an Arcola plant. A Shipmate gas-range in the galley takes care of cooking requirements.

The engine room with its machinery and elaborate equipment will gladden the hearts of mechanical engineers who have an opportunity to inspect the installations, the location and operation of the many articles that go to make up a complete engine room having been given the most careful consideration. In this engine room, in addition to the two big Winton diesel main engines, are two Winton generators, air-compressors and an Exide Ironclad battery type MVA-II. Decatur water-pressure systems are installed for the supply of both fresh and salt water. Specially built bilge pumps are arranged with connections in the various sections of the bilge and pumps are supplied for washing off the anchors and flushing the decks. Ilg blowers supply forced ventilation.



The owner's stateroom is tastefully arranged and decorated

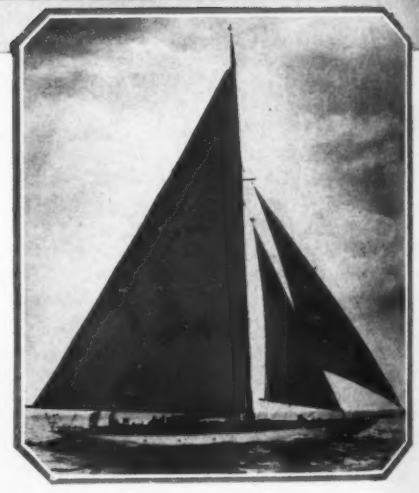
THOUSANDS OF YACHTS CROWD TH

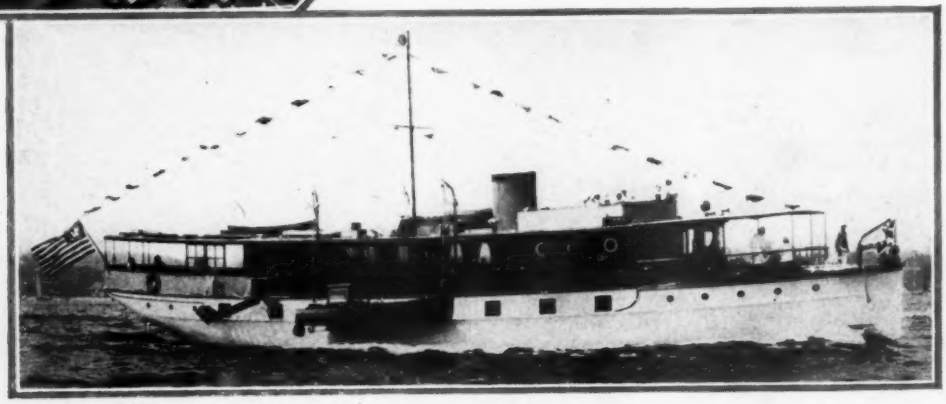
The welcome to Admiral Richard E. Byrd as seen from the air. Hundreds of boats crowded around the landing pier

Avenger, a big 74-foot auxiliary sloop designed and built by Herreshoff for Wm. W. Watson of Philadelphia and powered with a Model F-4 Scripps engine of 40-horsepower

Memory, a Winton diesel equipped houseboat built by Mathis Yacht Building Co., for Frederic E. Kingston of New Haven

International News Reel



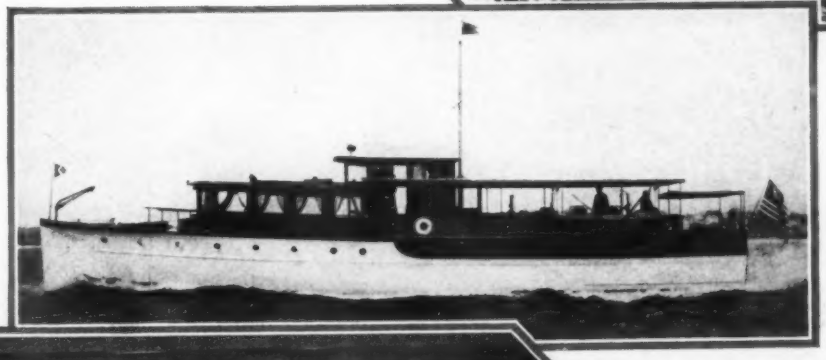


THAMES RIVER AT NEW LONDON

Photograph by M. Rosenfeld

New London, Conn., attracted countless yachts and motor boats for the Yale-Harvard Regatta there in June. Our panorama shows some of the activity on the Thames River

Floyd Gibbons seeking new thrills looks over the cup defenders Weetamoe and Vanitie from the cockpit of a fast Chris Craft

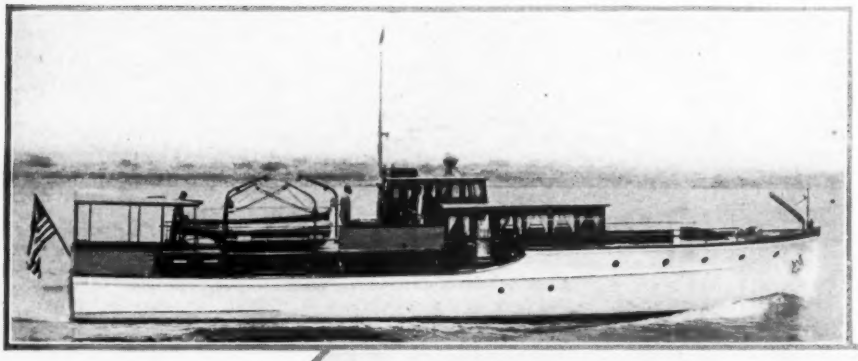


E. Tanare

Freba, 77-foot cruising houseboat built for Wm. S. Barstow of Great Neck by the New York Yacht Launch and Engine Co. She carries a pair of Twentieth Century engines

Interior of the new floating club house of the Junior Yacht Club of the Manhasset Bay Club. This houseboat hull has been comfortably appointed for the younger generation of yachtsmen

INTERESTING HAPPENINGS IN THE



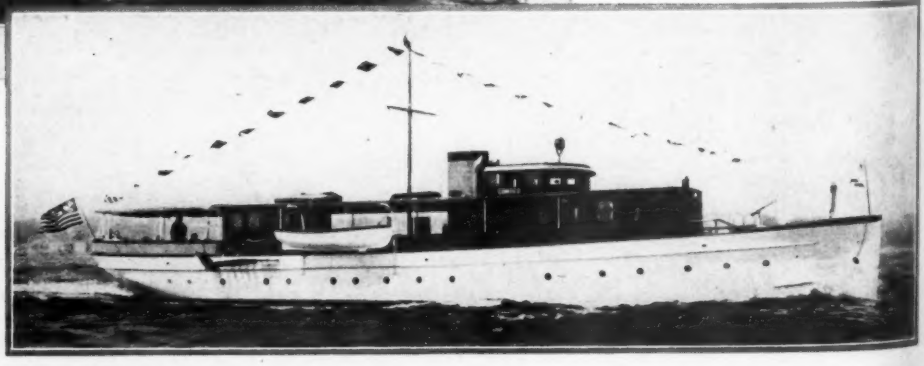
A new 74-foot Hall Scott powered cruiser Orthia, built for Archibald M. L. DuPont, by the Marine Construction Co. of Wilmington

A speedy 45-foot double cabin Robinson Sea Gull recently delivered to Lawrence Schwab

Photograph by M. Rosenfeld

Ulua, a 55-foot auxiliary yawl designed and built by the Lawleys for Wm. S. Gould, Milton Point, N. Y. She carries an F-4 Scripps for the auxiliary power plant

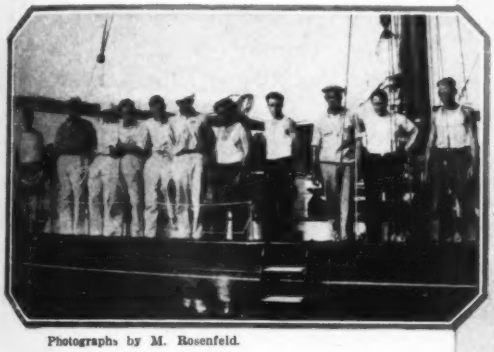
Comoco, a new diesel yacht designed by Henry J. Gielow for R. W. Judson of Detroit. She was built at the Bath Iron Works and equipped with two Cooper Bessemer Diesel engines



BOATING WORLD BOTH NEAR AND FAR

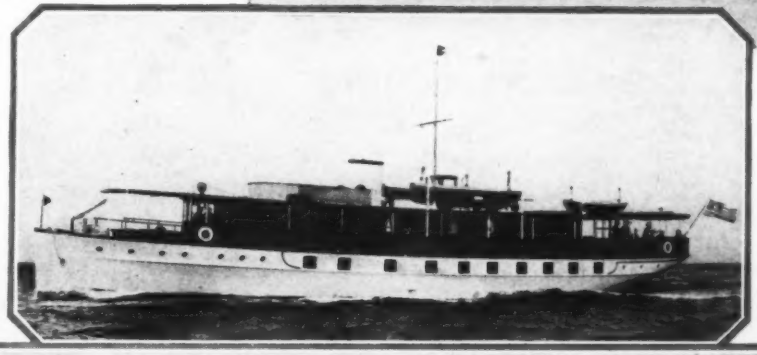
Malay, winner of the corrected time prize and the class B prize in the race to Bermuda in June. She is owned and was piloted by R. W. Ferris

The crew of Yankee Girl II navigated by her owner G. W. Warren of New York. She was the first to arrive at Bermuda after 600 miles of ocean racing



Photographs by M. Rosenfeld.

Mono, a 105-foot houseboat designed and built by the Mathis Yacht Building Co. for George K. Morrow of New York. She is equipped with two Winton Diesel engines



An interesting view of the rowing races at Poughkeepsie, N. Y., showing the outlook over the course with the numerous yachts anchored for the spectacle

INTERNATIONAL RACING CELEBRITIES

Sportsmen Who Will Uphold the Traditions of Great Britain and America at the Harmsworth Regatta at Detroit

Commodore Gar Wood who will race his new unlimited hydroplane Miss America IX as well as Miss America VIII

Hubert Scott-Paine of London who will race Miss Britain in the International 5½ litre class

Commodore George Harrison Phelps of the Detroit Yacht Club, the man at the helm

Miss Marion Carstairs who has brought her two boats, Estelle IV and Estelle V to this country to compete against Gar Wood

FIFTEENTH HARMSWORTH RACE AT DETROIT

International Competition for Famous Trophy and Races for New 335 Cubic Inch Class to Feature Largest Regatta Ever Held

THE kings and queens and lesser royalty of speed on water will assemble in Detroit on Friday, August 29, to engage in the numerous and various events which make up the fourteenth annual regatta of the Detroit Gold Cup Committee, Inc.

Leading the list in general public interest will be the race for the Harmsworth trophy, indicative of supremacy in motor boating. This competition will see Commodore Gar Wood for the United States defending his International championship against the British challenge of Miss Marian Barbara Carstairs.

While the Harmsworth is naturally the headliner on this year's program, it has been deprived of its most distinguished attraction by the recent tragedy of Lake Windermere. The passing of Major Sir Henry O. D. Segrave at the very moment when he seemed to have perfected the fastest boat in history has saddened his millions of admirers and left the world of sports without one of its pre-eminent personalities. Many believe he would have lifted the Harmsworth with his Miss England II. And certainly he would have been on at least an even footing with Gar Wood had the long-awaited clash between these champions eventuated.

But lest anyone think that the Union Jack went hopelessly out of the Harmsworth in the Windermere accident, it should be recalled that Miss Carstairs is already represented at Gravenhurst, Ont., with two boats, Miss Estelle IV and Miss Estelle V, both of which she believes capable of more than 90 miles an hour. And as this is to be her last try for the trophy, we can look forward to a great race and a mighty challenge.

Miss Carstairs is not alone in contributing international flavor to the Detroit regatta. Hubert Scott Paine, the noted English designer, will race Miss Britain I in the Detroit News International Trophy event of three 15 mile heats for the 5½ litre (335 cu. in.) class. In addition, speedsters from Italy, Germany, England, Canada and perhaps France and Belgium will compete for the Yachtmen's Association of America International Outboard Trophy. This is for Class B outboard motors with amateur drivers and limited to three entries from each country.

Ranking almost as important as the Harmsworth race will be the Dodge "Sixteen" 50-Mile Sweepstakes starting at 12 o'clock noon on Labor Day. The Horace E. Dodge Boat and Plane Corporation and the Lycoming Manufacturing Company have contributed $6,000 which will be offered in cash to the winners of this race which will be open to standard and stock 16-foot Dodge runabouts powered with 40 horsepower stock Lycoming motors. The prize money which will be in cash will be divided among the first ten boats to finish, with $1,500 going to first, $1,000 to second, $800 to third, $500 to fourth and so on down to tenth place. In addition to the cash prizes for the first ten boats to finish, $1,000 in cash is offered as lap prizes, $50 of which will go to the leader at the end of each lap. Thus if the winner leads for the entire 20 laps, he will draw a cash prize of $2,500. This race will be open to anyone of over 14 years of age except those employed by either the Dodge or Lycoming Companies, who will not be eligible to compete. Entry blanks may be obtained from K. M. Smith, Dodge Boat and Plane Corporation, 21 West 46th Street, New York, N. Y., and must be filed with W. D. Edenburn, 1805 Stroh Bldg., Detroit, on or before Saturday, August 30.

The Dodge Sixteen 50-Mile Sweepstakes race will be held on the regular 2½ mile course starting and finishing in front of the Detroit Yacht Club. It promises to be the most important and spectacular race of its kind ever held. With $6,000 in cash as prize money it is expected that the race will attract upward of 50 starters.

Then there is an array of other tests scheduled, including the Kermath Trophy cruiser handicap, the runabout free-for-all, the dinghy race for yacht owners, a glider take-off for endurance record, the Matthews, Liggett, and Corsair and A.C.F. cruiser chance invitation races, and others.

The regatta begins Friday, August 29, with the first heat of the Kermath event scheduled for 1 p.m., continues through Saturday, Sunday, and Monday, and concludes Tuesday, September 2, with mile trials for records (if requested) and the third race of the Harmsworth (if that be necessary).

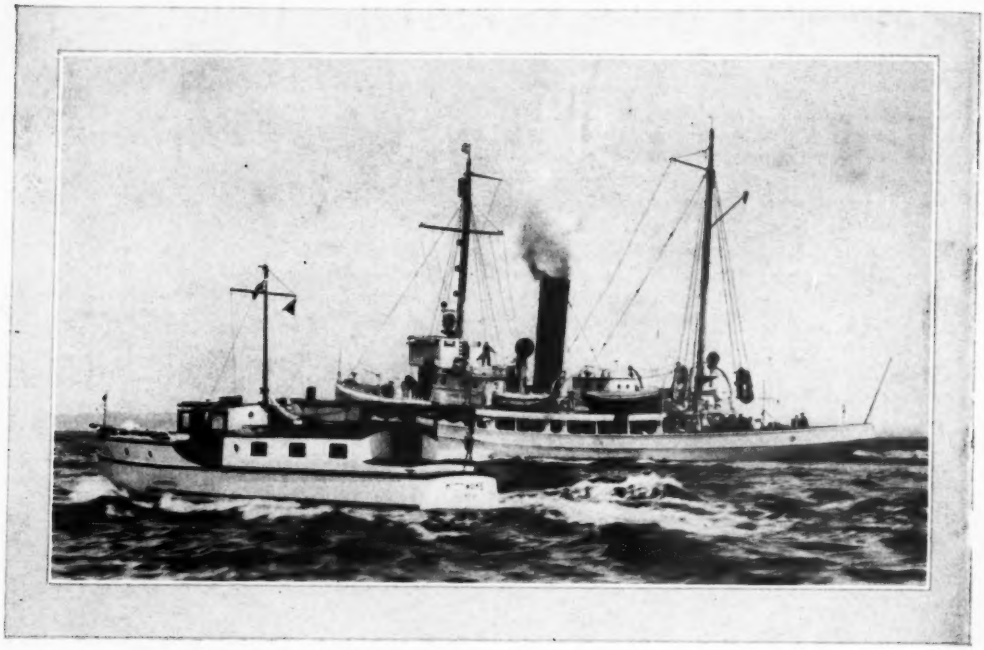
At this writing only England and the United States are represented in the Harmsworth. Prince Ruspoli, the Italian driver, at one time planned to enter, but he recently announced his inability to prepare a worthy challenger in the short time remaining. It is hoped, of course, that another foreign threat will appear on the horizon, but right now the 1930 event looks to be strictly a matter between the Union Jack of Miss Carstairs and the Stars and Stripes of Gar Wood.

Commodore Wood has not yet divulged his plans for the defense of the trophy. If Miss America VIII is entered by him, it is assumed that Gar and Orlin Johnson will man her. George Wood, brother of Gar, probably will be at the controls of the other American boat if Commodore Wood prepares two entries. But George Wood's illustrious companion of other years, Capt. Lionel M. Woolson, will not be in his familiar place this time. Capt. Woolson, inventor of the Packard Diesel engine and a lifelong motorboat enthusiast, was killed in an airplane accident a few weeks ago. But those who knew him cannot help feeling that the spirit of the dauntless Cap will be flying along with the American entry when it meets the British challenge.

The Harmsworth of 1930 will be inaugurated on Saturday, August 30, at 5 p.m., when the first race will be run over the 30 nautical mile course. The second race is scheduled for 5 p.m. Monday, Sept. 1. If a third race is required it will be run Tuesday. The trophy, formally known as the British International Trophy, was presented for competition by the Right Honorable Alfred Harmsworth, Lord Northcliffe.

This will be its 15th running. Gar Wood won the Harmsworth in 1920 at Cowes, England, and ever

(Continued on page 78)



Coast Guard cutter Snohomish, convoy ship and the Kittiwake enroute to Prince Rupert

THE SEATTLE—PRINCE RUPERT RACE

A Dozen Cruising Craft Finish a Contest of 569 Miles on the Picturesque Waters of the Pacific Northwest

FIVE hundred and sixty-nine miles northwesterly, through sheltered waters, under sunny skies, with such scenery on every hand as only the Pacific Northwest of Puget Sound and British Columbia offer you—

That was the Seattle-Prince Rupert International Cruiser Race in which twelve motor craft, ranging in size from the 25-foot Zize of Charles J. Blanc, Seattle restaurant man, to the 100-foot Nisbet, competed between June 20 and 24. All twelve entries finished the race, arriving at Prince Rupert, British Columbia, between 11:25 a.m. and 5 p.m. on Tuesday, June 24.

Five hundred and fifty miles of the race were over the same course covered in the 1,000-mile Capital to Capital cruiser race run in 1928 and 1929 between Olympia, the capital of Washington and Juneau, capital of Alaska, and which will be run again next June or July, according to present plans.

While sporting skippers of the cruisers had their minds on tides, cross currents, wind and engine revolutions, the race was sought this Summer by the Prince Rupert Board of Trade as a means of calling attention to the fact that nowhere in the world is there such a motorboat playground as the Evergreen country of Puget Sound and British Columbia afford the motorboat owner. And the fact that the little Zize negotiated Seymour Narrows, the Gulf of Georgia, Johnstone Strait and Millbank Sound, was ample proof any craft, regardless of size or power, can cruise the sheltered inland waters, and could go on for the remainder of the 1,000 mile trip to Juneau.

The route followed in the Prince Rupert Race took the boats through a blue-green land of a thousand wooded islands—blue water, green fir trees, dark blue hills and snow capped mountain peaks. On the twelve motorboats were 103 persons, who raced to Prince Rupert, but made the return trip a real vacation, loafing up enticing inlets, fishing in mountain lakes and streams for trout, and catching Spring Jack salmon at the edge of the tide rips in salt water.

Virtually all the route to Prince Rupert recalled the history of the early days of exploration by the British navigators, seeking until scarcely more than 130 years ago, a Northwest passage from the Pacific to the Atlantic, a search now unnecessary since the riches of the Orient are landed by fast steamships at Pacific Coast ports and whisked across the continent in a matter of hours by the northern transcontinental railroads.

Particularly did Captain George Vancouver, who

discovered, or rediscovered the Strait of Juan de Fuca, in 1792, leave his impress on the country in nomenclature, from Seattle to Prince Rupert. In Mount Baker, seen from Puget Sound opposite Bellingham, is the name of Lieutenant Baker of Captain Vancouver's expedition. Mount Rainier bears the name of a British rear admiral, Port Townsend, named after the Earl of *Townshend,* the *h* having been dropped through usage, Menzies Point, named after Mr. Menzies of the expedition, Johnstone Strait, named after Mr. Johnstone.

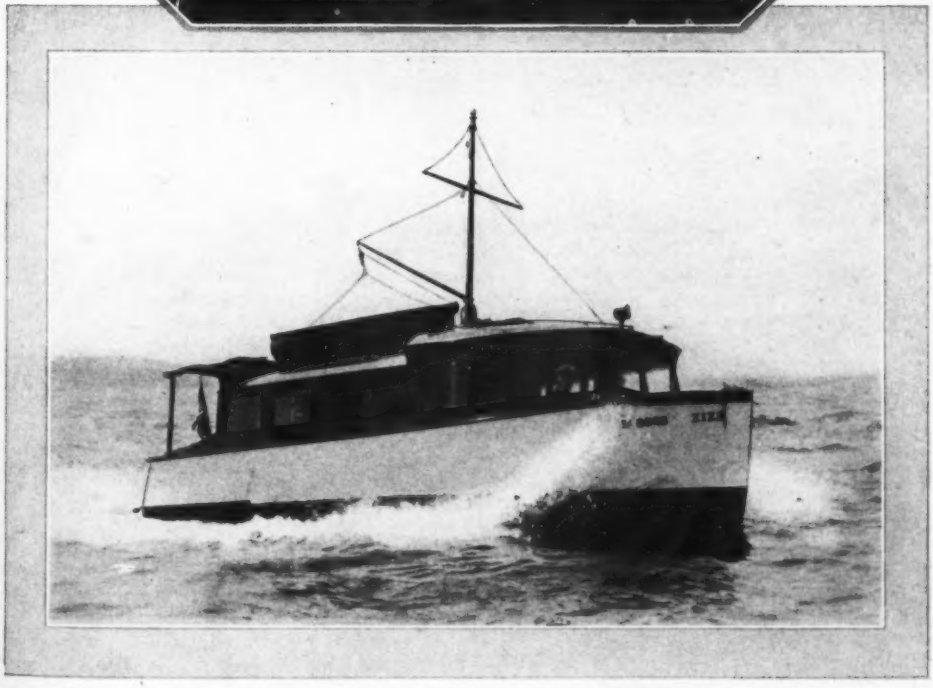
A hundred other such names appear on the charts and maps of the navigator. Even Puget Sound itself, that great inland body of water from Seattle to the Gulf of Georgia, was named after the young lieutenant of Vancouver's expedition, Peter Puget. Returning, near Yewcletau Rapids, our own crew saw the spot where Captain Vancouver hauled his ship up on the beach for repairs. It is no wonder that the British navigator grew enthusiastic in his reports, which bordered at times on the lyric, for in the Yewcletau country is majestic grandeur of sheer mountain cliffs, towering thousands of feet from the very water's edge, a virgin country that is yet unspoiled, and must look as it did to the early explorers.

But, returning to the race itself. It was planned to be fair to every contestant, giving the best informed and most skilful navigator the best chance to win. The contestants might elect the speeds at which they would run. Entries varied from 7 to 9 knots. The boats were tested for these speeds by officials of their own yacht clubs, and by the United States Coast Guard cutter Snohomish, which acted as a convoy ship. Handicaps then were decided upon. First of the cruisers started at 6 o'clock Friday evening, June 20. Others started Saturday and Sunday. The schedule was so arranged to give each skipper ten hours layover during the race, and this was required to be taken at any point the navigator might elect, for the purpose of taking advantage of tides, wind and sea.

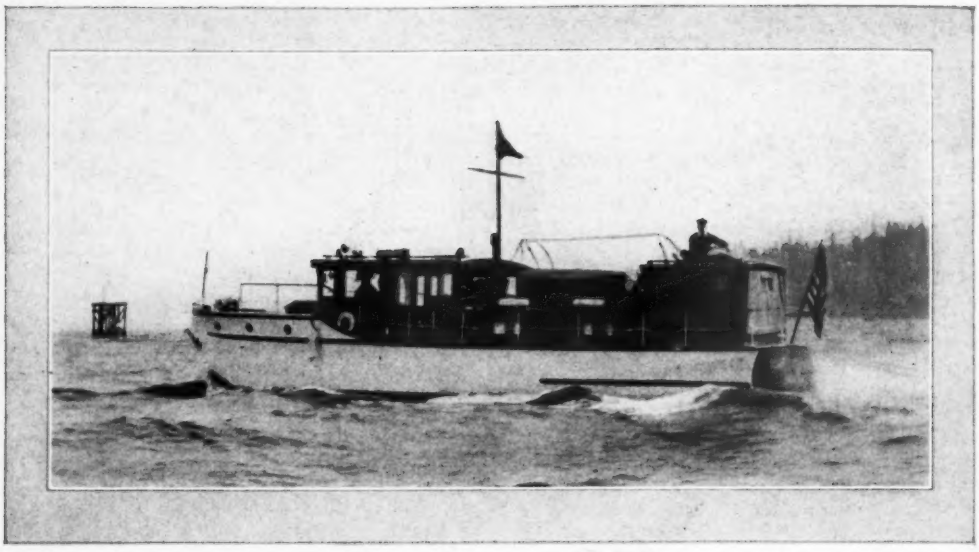
A member of the crew of Winifred II, entry of Adolph Schmidt, Pacific Northwest hotel executive, the writer enjoyed all the thrills of a novice. Winifred was off at 6:19:30 Saturday morning, with Triton, another eight knot craft. The start, in an early morning mist, was a jockeying for position at the float, at the Outer Station of the Seattle Yacht Club, suppressed excitement of the crew and skipper, a wave of the official's hat from the dock, a blast of the cruiser's whistle, and then the full roar of the engine. We were off. The mate took the wheel from the skipper, who proceeded to celebrate by cooking a breakfast of hot cakes, bacon, eggs and coffee for six hungry men.

The course was up Puget Sound, past Bainbridge and Whidby Islands, recalling at once names from the historic days of Vancouver. Joseph Whidbey was master of the ship

Winning skipper and crew Prince Rupert Race, Jack Power, skipper of Maidie, on left



Smallest craft in Prince Rupert Race. Entry of Chas. J. Blanc, Seattle restaurant man



Mary-Mar-Ann enroute to Prince Rupert

Discovery in Vancouver's explorations of 1792, when first he viewed the site of Seattle. Whidby Island is unique in that the warm Japanese current, which gives Seattle and the Puget Sound country its ideal marine climate, so swirls around this island that its crops are weeks ahead of those in other places nearby on the mainland. Already, in June, there was the golden appearance of harvest time in the fields.

In the afternoon came the San Juan Islands, scores in number, which travelers declare have a beauty and charm which is more appealing than the Thousand Islands of the St. Lawrence. Then Deception Pass, where the tide races through, and the opening seems so narrow that a man could almost leap from shore to shore. Later, Pole Pass, where the water is even swifter. In the evening, we passed the lights of Nanaimo, thriving British Columbia coal mining town, on the southeastern shore of Vancouver island.

Just before Nanaimo came sunset—a gorgeous glare of sun reflected from the water, with deep reds and purples in the hills, fading in the background into almost indigo blue. The skipper left the wheel at this point to use his motion picture camera. Night was an even, uneventful trip across the Strait of Georgia.

Crew of Winifred. Geo. Bushby, President, Prince Rupert Rowing & Yacht Club. Adolph Schmidt, skipper of Winifred. Dr. F. J. Phillips, C. E. Johns, Richard Batcheller, C. E. Fullerton, Mr. Henderson.

Early Sunday morning took the Winifred past Campbell River, home of Tyee club, where princes and babbits come from all corners of the world to fish for the game tyee salmon. There is no entry to the society but skill with light tackle, and the weight of the fish determines whether the member shall wear a bronze, silver or gold buttom. The president for the ensuing year is that man who caught the largest salmon under strictly approved conditions.

We saw the Coast Guard cutter Snohomish just beyond. Through Seymour Narrows with the tide, and we took our first layout in Deep Water Bay, when the tide turned against us. After two hours we were off again, through Johnstone Strait, and passed Alert Bay in the early evening. We crossed Queen Charlotte Sound Sunday night. There we encountered the roughest water of the trip, but all the crew proved good sailors. The only difficulty encountered was search for a light recorded on the charts as a revolving light, but which was stationary. Through sheltered waters Monday, the skipper decided Monday evening to take all his remaining time out in a little Inlet just beyond Klew Nugget.

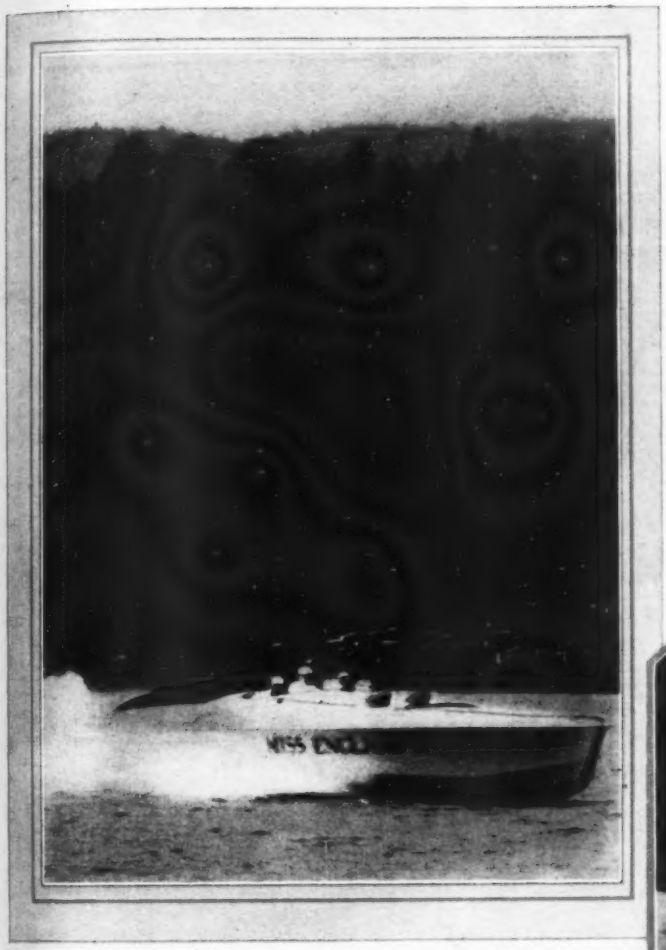
So near the end of the trip, the excitement grew again. Seven cruisers passed in vision during the wait. It tested nerve of the skipper and crew to see the little boats go filing past toward Prince Rupert, and lie inactive. But in the early morning hours we were off again, and nothing more to stop for during the race. At Stewart Anchorage we counted four boats still lying in to complete their unexpired time. A few miles beyond, one of the nine knot craft Mary-Mar-Ann came out and took after us. It was a race all the way into Prince Rupert. We arrived at 1:16 p.m., the seventh boat to check in, and Mary-Mar-Ann was less than three minutes behind.

Arrival of the cruisers was:

Maidie, 11:25½ a.m.; Bolinder, 11:30¼ a.m.; Nisbet, 11:49¾ a.m.; Buccaneer, 12:16 p.m.; Triton, 12:31¼ p.m.; Rowdy, (*Continued on page 94*)

MAJOR SEGRAVE RECORD 98.76 M. P. H.

Speed Officially Approved by the International Motor Yachting Union

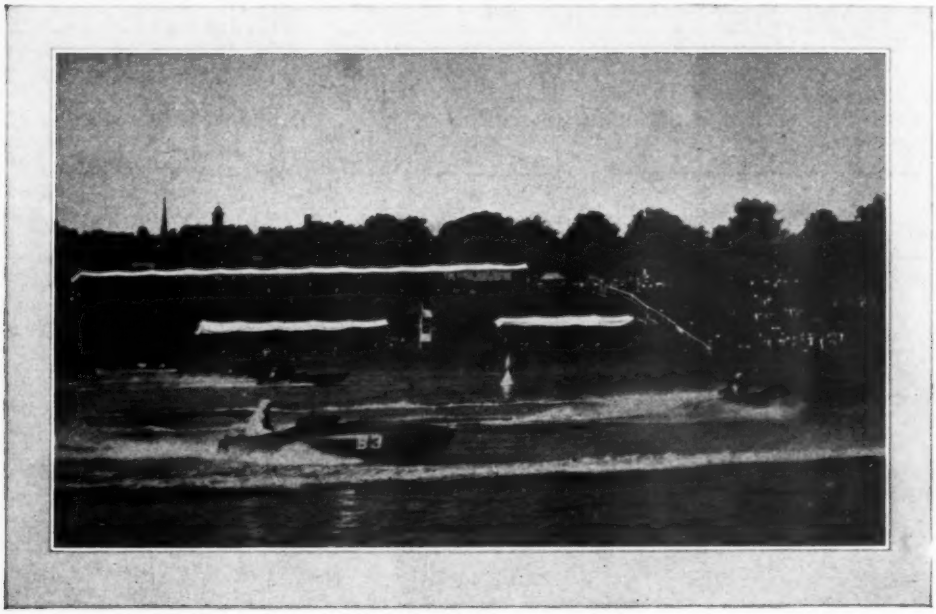


Miss England II on her record-breaking run on Lake Windermere, England (*See also page* 138)

Photographs by International News Reel

Miss England II before she sank

Below: A view of the bottom of the boat—note the forward step nearly torn off



Start of first heat 151 *class limited B-3 Empire State, Carroll M. Hall, Jamestown, N. Y., won in straight heats both limited and unlimited events*

MADISON CELEBRATES THE FOURTH

Indiana Town The Scene of Excitement and Speed During the Annual Regatta of the Mississippi Valley Power Boat Association

By VERRA THOMAS GRIFFITH

PISTON HEADS and trundle beds, time sheets and love seats, speed bugs and hooked rugs, hunting boards and outboards. In short motor boats at Madison, the supreme anachronism.

Surely at no time and place has Old Man Past not only met up but actually become chummy with the hustling Young Present under more auspicious circumstances than July 4th and 5th at Madison, Indiana, quaintly picturesque and beautiful Ohio River town. The occasion was the 23rd annual national regatta of the Mississippi Valley Power Boat Association and for the several days preceding and the two days of the racing the two hobnobbed together in regular old crony fashion. If they parted, the one with a bit more tolerance of and desire for progress and the other with a lot more respect and reverence for days that are gone, so much the better for both and the world at large.

There was something, however, in the juxtaposition of the two that was almost bewildering, often amusing, at times pathetic and never boring. Indeed, one who, like the writer, is a compound of love for the past and delight in the present, found the situation more than confusion, with the Then tugging against the Now, one ear tuned to the roar of the engines on the river, the other cocked to catch voices from yesteryear; one eye following the spray of a speedster that might upset on the turn, and the other re-seeing the beauty of a cherry sugar chest viewed but an hour earlier; one hand eagerly scribbling notes on times and broken records, and the other itching to feel again the stairrail of the lovely Lanier home, worn to that indescribably satiny finish by countless long quiet hands.

A woman, who, one knows at first glance, is both aristocrat and autocrat, a woman well along in years swathed in black draperies, richly elegant, whose lace mitts left exposed fingers weighted with heavy gold, jewel set rings, whose black jet bracelets and chain jangled faintly as she moved, whose gold headed black cane lent support on one side, as her companion, a wispy person with a timid, almost furtive, expression, did on the other; and who announced "We leave," in majestic tone as she rose to depart for her mansion on the hill above. Such a woman belongs to a Hergesheimer novel, yet we saw her in Madison, saw her sitting in the crowd filled grandstand and sensed her evident enjoyment of the scene on the race course before her. "Boats," she opined, as she watched them make several tries at a get away, "are like prima donnas—temperamental. Humph!" Scorn in the voice, and yet liking, if one watched, in the heavy lidded eyes.

A man—grease-grimed, dirt-daubed driver of a race boat, holder of several records, whose steady hand never trembles on the wheel as he guides his craft at a mile a minute clip around the water oval, whose seemingly sole determination is to gain another revolution out of an already incredibly swiftly whirling propeller, and is ready to sacrifice endless time, effort, yes,

and his safety, too, to that end. Such a man belongs on the sport page or in some wild thriller, tale of the heroes of land and sea and air. Yet we saw him in real life in Madison, saw him standing entranced in a walled garden bright with old fashioned flowers. With dreaming eyes he gazed at the spot where once steamboats landed bringing guests to this long famous estate, and heard him, speed hound that he is, sigh for the leisure and beauty of that bygone life.

At Madison, racing men and fans lived in an hostelry whose thick brick walls had once housed a convent and dined in a large room, once the chapel, now distinguished by a huge bar across one end. Dry—that bar? Oh, yes, indeed, even when, as happened twice daily, the rising tides of boat folk swept over the sill and filled the room. Above it hung a huge mirror, brought from France through the port of New Orleans and thence by water, up the Mississippi and Ohio when that waterway to whose importance we are just awakening was of vital value, a mirror capable of reflecting the whole big room in its still unclouded depths. The race men and fans kept their cars in huge old buildings once used by the pork packing industry which flourished in Madison in the pre-Civil war period and made it then the largest city in the state. They towed their boats through streets where the old brick house gazed at them through their many paned windows in unfeigned wonderment. They drove their little speedsters on the waters of the Ohio at a breath-taking pace not even approached nor in fact desired by the palatial steamers that in another day puffed their calm way over the same course. At Madison, men to whom the words "Sandwich glass" would connote only something with cheese between in one hand and something else with foam running over in the other, paused in spite of themselves to admire the stately old homes with their ancient guardian trees. Men and women too, who remembered when Jenny Lind gave a concert in Madison, were drawn to the river by the strange activities and remained, despite their intention, to wonder alike at boats and bathing beauties. The old and the new, yesterday and today! One almost expected them to intermingle—to hear of a runabout built on Sheraton lines and find comb back Windsor chairs in the grandstand, to learn that all the cups were pewter and the other trophies bits of Staffordshire. Many a boatman towed home not only his boat and awards (if any) but a tilt top table or ladder back chair as well, and he'll be lucky if he gets a place on the living room mantel for the cup he won after Mrs. Boatman has seen the effect of the brass candlestick she got in Madison there.

At any rate, it is certain that the old did not influence the new to the extent that the racing was slowed down by the general atmosphere of leisureliness in the town. The usual three days racing of the annual Valley event had been crowded into a two day program with the result that both days were replete from morn to night with a succession of hotly contested events of all kinds, outboards, hydroplanes, runabouts, and cruisers competing, and mile trials besides. Several new records were set up, three in outboard competition and two in mile trials and all, strangely enough, by Class C outboards. Jack Smith of Newport, Kentucky, captured two of these driving a Johnson powered Arrow hull in the Division I Class C outboard event, and at a slightly lessened speed (rather odd that, too) over a straightaway mile. Geo. Cost of Birmingham, Ala., also staged a double-header when his Indian hull equipped with a

(*Continued on page* 182)

Secretary Geo. G. Hall, Madison Regatta Committee on board Matthews 38 used in bathing beauty contest

R. A. Yunkers, James P. Lacey, Geo. G. Hall, J. Graham Ross and group of bathing beauties who took part in regatta parades

Maid O'Rye, S. D. Platt's new Elco cruisette which won the cruiser race to Block Island

FOURTEEN RACE TO BLOCK ISLAND

Silver Anniversary of Famous Long Distance Race Attracts Fine Field of Cruisers and Sailing Craft Who Make the Hundred-Mile Trip

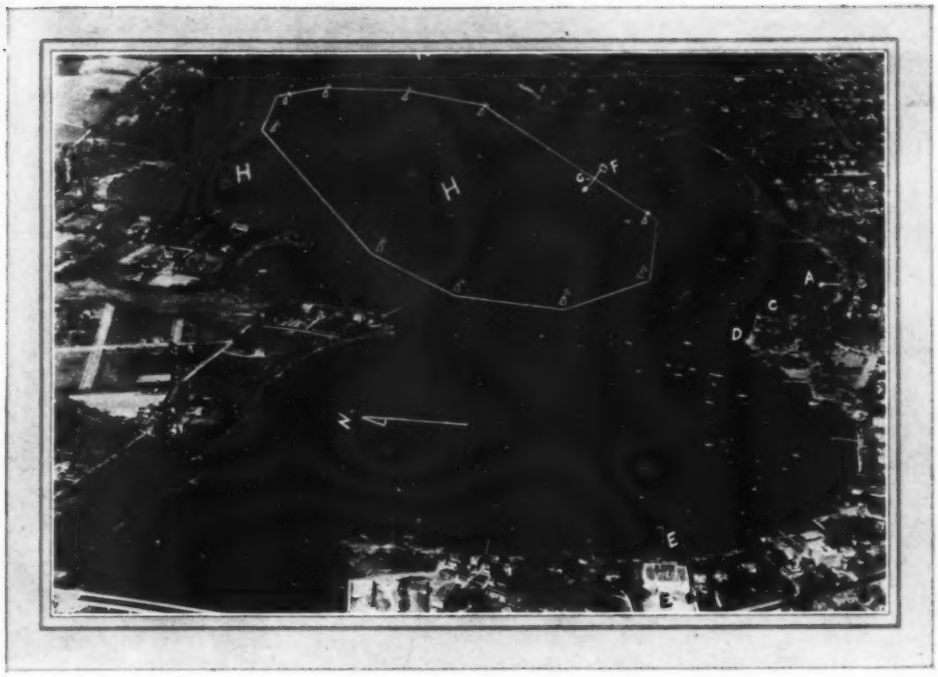
WAY back in 1903, two good yachting cronies, Harry Jackson and R. W. Rathborne, were down below in the cabin of their boat safely at anchor in Lloyds Harbor while an easterly gale blew itself out. The discussion turned to the possibilities of a race in which every contestant would have an equal chance of winning and after a long argument it was decided to inaugurate a race which was to start at Execution Light and finish in Block Island Harbor. In those days sail boats were the only form of yacht in use and naturally this type of craft competed for the first time. It was difficult in those days to interest yachtsmen in an event of this kind, although a goodly number did take part. Subsequent years saw increasing interest in this race and it has been run without interruption ever since with the exception of the years 1917 and 1918 when it was discontinued temporarily on account of war time conditions. The New York Athletic Club which stood behind this race in the beginning has sponsored it ever since. It is one of the outstanding motor boat and sailing classics which are conducted each year. The Yachting Department of the New York Athletic Club also had its beginnning with the first race run in 1904, and has in the intervening years grown to be one of the most important and thriving of the departments within the great club.

In 1908 the motor boat had developed to the point where it could be trusted to run for a sufficiently long time to venture on such a journey to Block Island and a race for motorboats was included in the conditions during that year. The well known cruiser Eronel, owned by S. Cochrane, proved to be the winner of the first motor boat race and this boat also competed in the long distance race to Bermuda later. As with the sail boat division, the motor boat race was interrupted during the war. It has always been run according to the most recent racing rules of the American Power Boat Association with the (*Continued on page* 110)

Start of the sail boat division with 18 *boats taking part*

A portion of the committee: W. H. Hussey, Wm. Kennelly, A. F. Jenkins, F. W. Horenburger, E. Benson and E. H. Tucker

Photographs by Tenare & Rosenfeld



An airplane view of the Gold Cup course at Red Bank, N. J.

GOLD CUP PLANS LOOK BIG

Annual Regatta at Red Bank, N. J., August 16 and 17 to Have Classes for All Types of Boats

NEVER before in the history of racing in the East have plans been so complete for such an active mid-season on every body of water suitable for racing as at present. The events for the America's Cup in September off Newport, Rhode Island, have created an international interest in sailing races with the result that every yacht that floats is in commission this Summer. The international motor boat races for the British International Trophy to be held in Detroit August 30 and September 1 will bring a British team of two boats to race Gar Wood for the Championship of the World. As important as both of these international fixtures are, they do not overshadow the Gold Cup Regatta at which the American Championships will be held. This important regatta is set for Red Bank, N. J., on August 16 and 17.

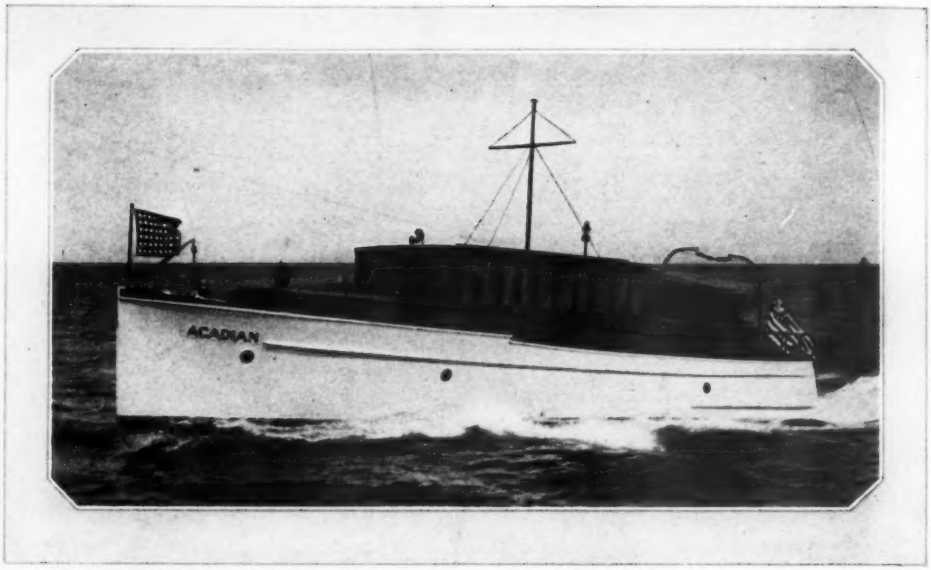
The American Power Boat Association Gold Cup which has been raced for annually since 1904 is now held by the Columbia Yacht Club as the result of Imp's victory last summer. This boat was driven by her owner Richard F. Hoyt and he won the 1929 races in three straight heats.

The Red Bank Yacht Club and the New Jersey Gold Cup Association under whose auspices the 1930 Gold Cup regatta will be held, in co-operation with the Columbia Yacht Club, have plans all made which will make it the biggest race meet ever attempted in the East, notwithstanding those that have gone before.

Imp, last year's winner, will be at the starting line, as will Scotty, which was also raced last year by Samuel Dunsford of Concord, N. H. Banfield is building a new boat for Commodore Gerald Holbrook of the Red Bank Yacht Club which is to be named Red Banker. At the time of going to press, this boat had not been given her first trials, but if looks in the shop are any indication, she should be very speedy. Commodore Richard Loynes of Long Beach, California, has built a new Gold Cup challenger named Californian, which is powered with a special Miller motor.

A newcomer in Gold Cup racing is George Reis of Lake George, N. Y. The Purdy Boat Company have recently completed a new boat for Mr. Reis named El Lagartito and powered with a Packard motor.

An interesting feature of the 1930 Gold Cup race is the entry of two of the old displacement type of boats, both of them famous, for this year's events. Miss Columbia, which raced in 1924, 1925, 1926 and 1927, representing the Columbia Yacht Club of New York, has been purchased by Theodore C. Hall and has been entered in the race. Hotsy Totsy, formerly owned by Caleb Bragg, has been purchased by Victor Kliesrath. The Purdy Boat Company is making some changes in the bottom of this boat and if the boat proves a success she will *(Continued on page 96)*



The Burger 46, a standard double cabin cruising craft of many conveniences

A DOUBLE CABIN FORTY-SIX

Roomy Cruiser Built by the Old Established Burger Boat Company in Wisconsin Provides Privacy and Comfort in a One-Man Design

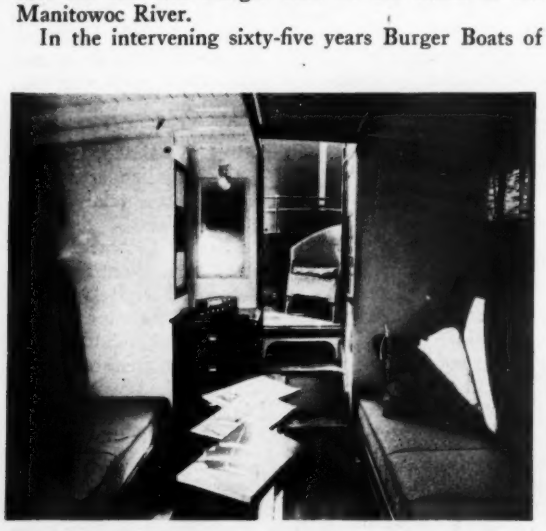
ASSOCIATED with the debut of the advanced Burger 46 standard double-cabin cruiser is a romantic interest that is rarely attached to the introduction of new boat models.

The brothers, Walter, George and Henry, builders of the 46, are the third-generation representatives of the original Henry B. Burger who, in 1865, laid the keel for the first Burger boat on the banks of the Manitowoc River.

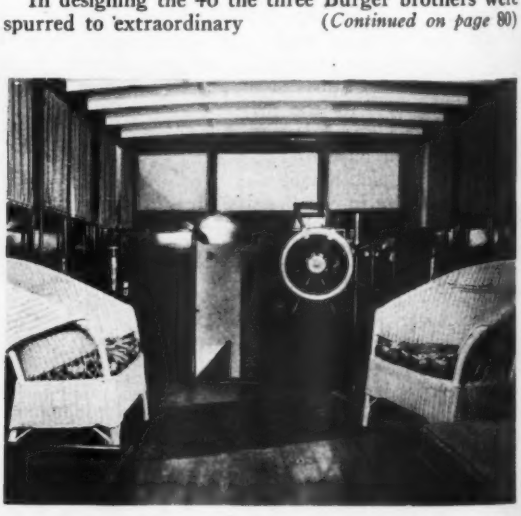
In the intervening sixty-five years Burger Boats of various types and sizes, and for all purposes, have roamed the seas, touching most of the principal ports of the world. During the war they served America and her allies. Speedy revenue cutters are even now helping the government to enforce the laws.

Burger makes luxurious yachts for the rich, money-makers for the industries and health-building recreation for the big majority.

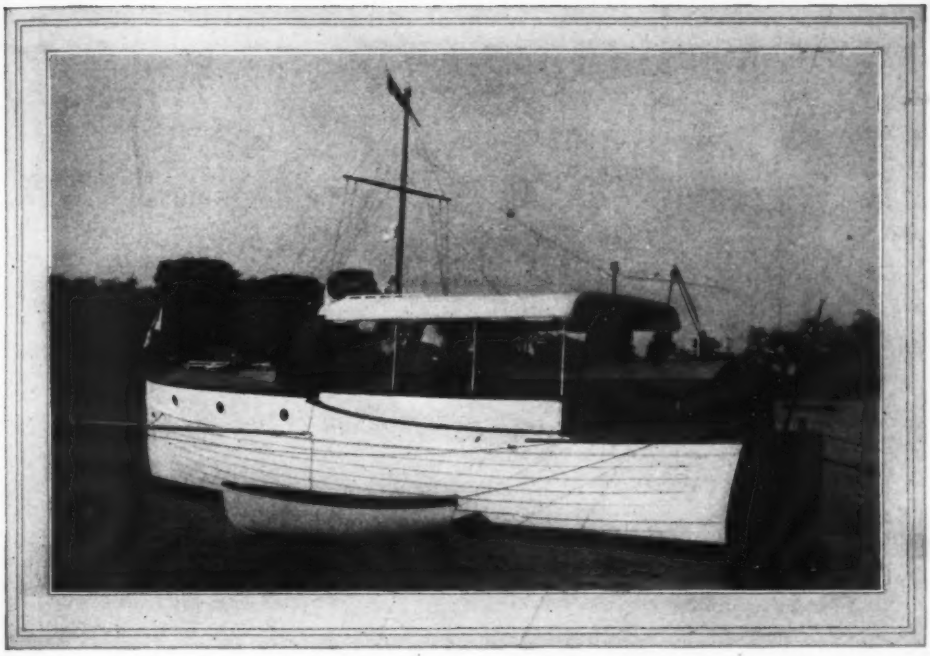
In designing the 46 the three Burger brothers were spurred to extraordinary *(Continued on page 80)*



The forward cabin is fitted with upper and lower berths accommodating four persons



On the bridge deck is the helmsman's position and lower berths accommodating four persons



Small boat boom rigged with light on tip

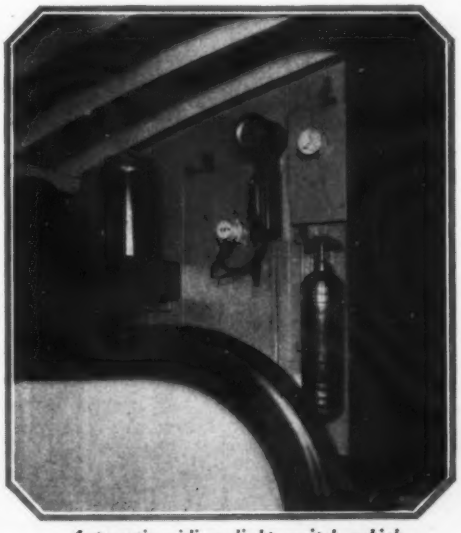
LIGHTING THE SMALL CRUISER

General Use of Electricity for Lights and Other Purposes Requires Batteries of Larger Capacity and a Means for Properly Recharging Them

By WOODRUFF R. SMITH

THERE are three methods of electric lighting used ordinarily in boats. The simplest is by means of storage batteries. This is sometimes the only system possible, and works fairly well at times, when little light is needed, and where it is possible to recharge the battery without too much effort. Batteries, however, are heavy, and where they have to be carried ashore very often for recharging it gets to be quite a problem.

The second method is in connection with the generator on the engine. This is the most popular method for boats under forty feet in length. Most modern engines have electric systems, and the current can be used for lighting, just as it is on motor cars. Generators for marine engines are made by the same people who make generators for cars, and are usually exactly the same as those they supply to the automobile manufacturers. On a car they are supposed to light two large lights, and two or three smaller lights, but the large lights are only used when the engine is running. Very different conditions are encountered in lighting a boat. In this case there are a great many more lights, some of them as powerful as the largest lights used on automobiles, and they are generally used when the engine is not running. It therefore usually happens that the charge the battery gets while the engine is running is insufficient for the use it gets after the engine has stopped, and the battery gets more and more discharged until finally it has to be taken ashore to be charged again. This system is unsatisfactory on auxiliaries where the boat may be under sail the greatest part of the time, and the occasional use the engine gets is barely sufficient to charge the battery



Automatic riding light switch which will operate for eighty days

Bridge with chart table showing drawer at left for access to side light bulb; phone communicates with bow

Port side of engine room looking aft, showing lighting plant, batteries, and fuse block

enough for starting purposes, or on work boats or other boats with such slow speed engines that the charging rate is kept very low. It never permits a very liberal use of electricity, but where a large generator is used with ample battery capacity, and on a motor boat that is under way a large part of the time it is in use, this system will probably be found satisfactory. In many cases the battery will last long enough so that the work involved in taking it ashore to be recharged is not particularly objectionable.

Some people use two batteries connected in parallel, that is, the positive terminal of one is connected to the positive terminal of the other, and the negative terminals are similarly connected. Batteries connected in this way will last twice as long as one, but they take twice as long to charge, and if the generator on the engine will not take care of one battery, it will not take care of two. A better way is to leave one battery disconnected, but have the wiring so arranged that it can easily be shifted from one battery to the other. A switch can be used, but in that case be sure it is big enough to carry fifty amperes. In this way you will always have a fully charged battery in reserve, and if some morning you find that the battery has been discharged so far that the engine will not start you will have a fresh battery to use.

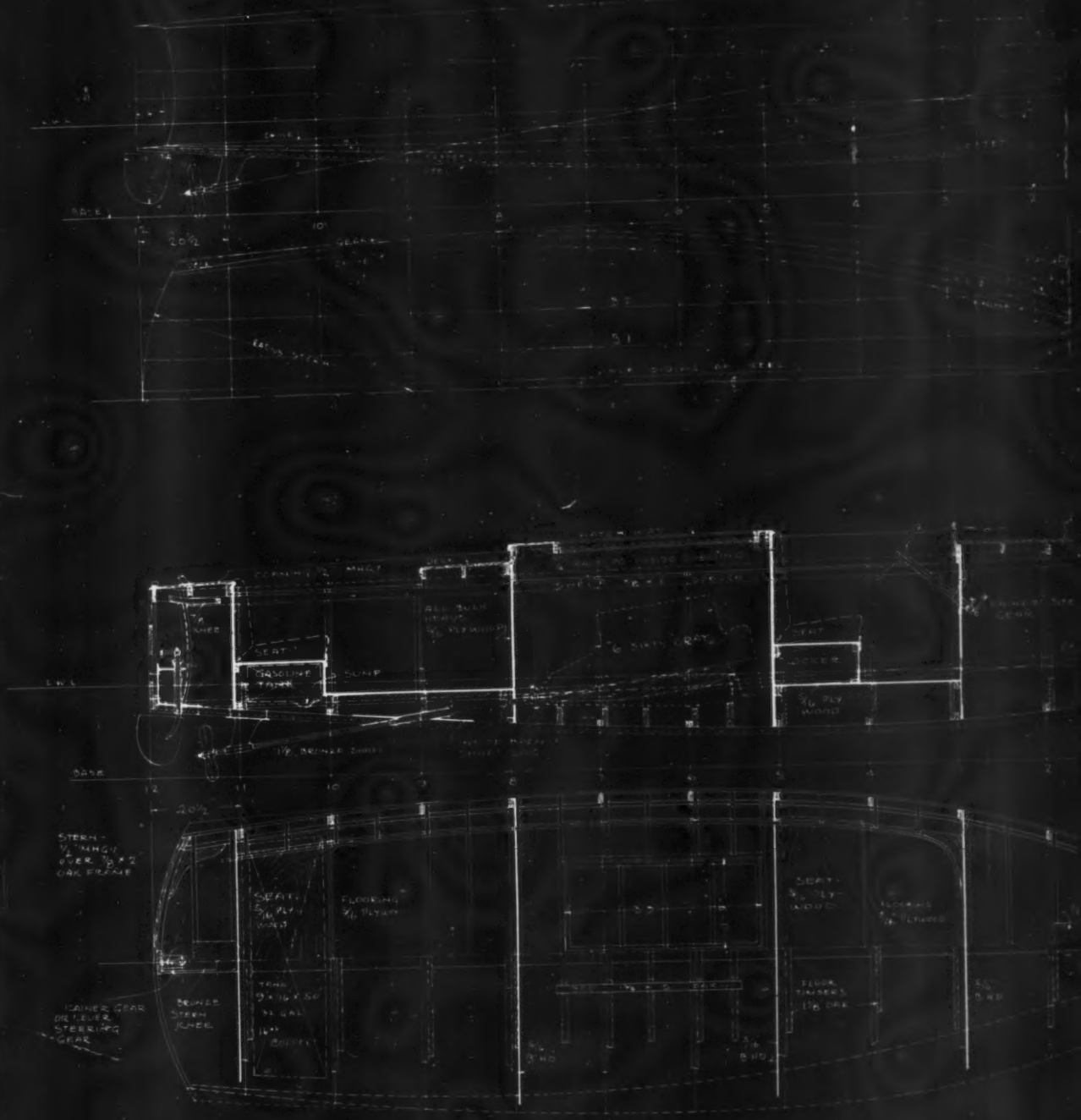
Interior of cabin looking aft, showing galley ventilator, lights, etc.

The third and best method is by means of a separate lighting plant. This system has been used for a great many years on large and *(Continued on page 72)*

MoToR BoATinG's [illegible]uild

"JUSTSO

A 21 Foot RunA



A Boat Series

D"

ABOUT

DIMENSIONS
L O A 21-0
L W L 20-6
BREADTH 6-2
DRAFT 1-5
FREEBOARD
BOW 2-4
STERN 1-10

TABLE OF OFFSETS NO 249				
STATION	A	O	I	
L W L TO SHEER	2-4	2-3½	2-3¼	2
L W L TO DECK CROWN		2-4½	2-4⅜	2
BASE TO CHINE		2-5½	2-1½	1
" B1 "			2-3	1
" B2 "			3-11½	2
" RABBET		2-0	1-1⅜	0
" KEEL		1-9	1-0½	0
" SHAFT				
DECK		0-5½	1-6¼	2
L L 6		0-3½	1-1¾	1
L L 4		0-2½	0-11¼	1
L L 2		0-1¼	0-9	1
CHINE		0-2	0-8¼	1
BOTTOM OF KEEL			0-0½	0

DIMENSIONS IN FEE

Scale: ⅜ Inch =

Designed Especially for

nch = 1 Foot
for MOTOR BOATING by WILLIAM ATKIN

JUSTSO, 21 FEET OF ABLE RUNABOUT

A High Sided Craft For the Man Who Feels that Dryness is a Desirable Feature In a Runabout

Designed especially for MoToR BoatinG

By WILLIAM ATKIN

PART 1

JUSTSO is a 21 foot over all runabout and was designed for a speed of 20 to 21 miles an hour with a motor of approximately 60 h.p. She has generous breadth and depth with enough flare forward to assure dryness. Let's see, now her breadth is 6 feet 2 inches; her draft is 1 foot 9 inches, this being under the propeller. Her freeboard forward is 2 feet 4 inches, while aft it is 1 foot 10 inches. Aft her sections tuck well under, making the chine line much less in width than her water line. Somehow this feature contributes tremendously to the ability of a V bottom boat's ability to run along fast in a sea. It is a well known fact that a broad chine with sections decreasing toward the deck have a tendency to trip a boat if it is turned sharply from a straight course, and that the more round there is in the sections aft the better the hull so designed will behave in rough water. Of recent years I have come to the conclusion that the V botom boat is not the ultimate form. While it is true that we have some marvelous going craft of V type, little has been done toward developing round bilge boats except for cruising purposes where speed is not the first consideration. In connection with this I notice that my old friend George Crouch who might well be called the father of the concave V bottom boat has turned out a very fine runabout and a fast one for the folks who are making the Aeolian runabouts and this is of the round bilge type. If you will look back in MoToR BoatinG to the issue of May, 1929, you will find the plans and an article on Ripalong. This is a round bilge fast fishing boat. Here is a boat that will go anywhere within reason; and I doubt whether there are many boats of Ripalong's size and power that will pass her in going anywhere. So before long now I shall finish plans for MoToR BoatinG of a round bilge fast cruiser that will be unique in every respect.

Now to get back to Justso. The arrangement shows the motor under hatches amidships with a cockpit forward and aft. This seems to be the vogue just now and has certain advantages not the least of which is that the weights are well placed in the boat; however, the after cockpit in these double ended arrangements is likely to be wet and with three or four persons aft the boat will not travel at a pleasing angle. Boats are queer things because they are always compromises; if you get extreme speed you do not get real comfort; if comfort is the first consideration, speed passes out of the picture. If appearance is desired you must do without full head room; with full headroom appearance goes overboard. Therefore one is forever compromising in an effort to get an average that will be satisfactory. And this is not a simple thing to do.

Sitting in Justso, because of her excessive freeboard, gives a sense of being in the boat, rather than on her. And of course this depth allows plenty of space for leg room, too. The beam makes broad seats possible so that three can sit in comfort without crowding, both in the forward and after cockpits. You will note that there is excellent room abaft the engine bulkhead for stowage of suitcases, lunch baskets, fenders, etc.

I am not keen on making plans of boats that are purely experimental. There is a lot of work about the building of even the simplest kind of a boat, also a lot of expense and for this reason it seems to me that all boats should be built from plans that are developments of craft that have been built in the past and not from craft that have been tried out only on the drawing board. If you will take the train from here now and journey overnight you will arrive at Peterborough, Ontario. There at the shops of the Peterborough Canoe Company you will find a boat building from plans similar to this Justso. And a nice little thing she will be, or should I say, a nice *big* thing?

Speaking of boats that have been built from MoToR BoatinG's plans it may not be amiss to mention Ben Bow, the 28-foot cutter which was described in the August 1929 number. This you will remember I was building for myself with various help from one of the local boat builders. Well, Ben Bow has at last been launched and rigged. She now lies at her mooring off the Huntington Yacht Club. I did just what I have advised against so often; changed my plans. But only in the matter of the arrangement of the berths inside, and the rig. Just as soon as I can get some good photographs of Ben Bow, inside and out, I shall give you all a description of this excellent little hooker. So far she has proved to be all that I promised. Look for this description a little later.

Building boats begins with the laying down of the plans. This being necessary for the purpose of arriving at the correct form of the building forms, and for the purpose of checking the architect's lines. Despite the utmost care, errors will pop up when the lines are drawn full size; this is always so. I like to see the full size drawings before work is commenced on the forms, and usually do if boats are building from my plans in this locality. You must remember that the slightest error in plans drawn to a scale of one-half inch to the foot will be multiplied 24 times when the boat is drawn full size. In other words, 1/32 inch error in the original plans becomes 24/32 inch or ¾ inch in the full size drawing. Now suppose station 2 on any plan is scaled slightly over 1/32 inch and station 3 is scaled the same distance under its exact dimension; why then we are 1½ inches out of line on the laying down plan. *(Continued on page 74)*

DRAGONFLY, A FOURTEEN FOOT RUNABOUT

A Big Little Boat Designed for the Amateur Builder and One Having a Good Turn of Speed

Designed especially for MoToR BoatinG

By WILLIAM ATKIN

Part II

IT may be well to mention that Dragonfly is a V bottom runabout 14 feet over all with a breadth of 5 ft. and a draft of 10 inches. She is of the single cockpit variety and is powered with a motor of 40 h.p. turning at approximately 3,000 r.p.m. I made some suggestions as to painting, operating, maintaining, etc., last month and promised that with the coming

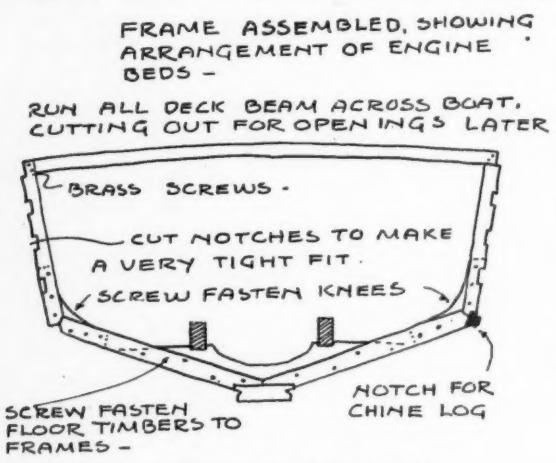

FRAME ASSEMBLED, SHOWING ARRANGEMENT OF ENGINE BEDS -
RUN ALL DECK BEAM ACROSS BOAT. CUTTING OUT FOR OPENINGS LATER
BRASS SCREWS -
CUT NOTCHES TO MAKE A VERY TIGHT FIT.
SCREW FASTEN KNEES
SCREW FASTEN FLOOR TIMBERS TO FRAMES -
NOTCH FOR CHINE LOG

Figure 1, *The frame assembly*

of the August number I would conclude the article including several sketches showing the construction in detail. Well, here they are.

All boats begin at the keel. In Dragonfly this will be made from white oak 1⅜ by 8 inches. The keel projects ½ inch below the line of the rabbet. This projection protects the garboard planks from possible damage and as well has a very strong tendency to reduce the wetted surface because the water flowing past the boat while it is at top speed flows out from the center line as well as aft. These wide flat keels also are excellent to have when the boat is hauled out

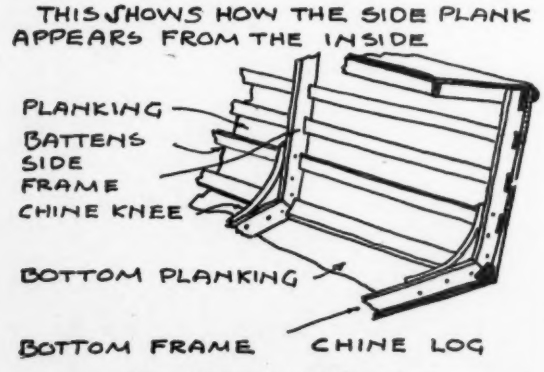


Figure 3, *How the planking goes on*

of the water, keeping the hull on an even keel; and in having a lot of surface a keel of this form will not crush in and be bruised when being jacked up, or rolled about the storage yard.

There are many places where white oak is not used extensively and so is not carried by lumber yards. If, then, genuine white oak is difficult to find use either yellow pine or fir, preferably the pine. Yellow pine is always a good substitute for oak. It stands up well under water, is tough, and reasonably light in weight. And there is one very certain thing about yellow pine; it is always genuine. Now, with white oak the reverse is true; few of us know for sure just what white oak should look like and because there are so many varieties of oak most anything is sold in its place. Some oak woods decay rapidly when submerged in either salt or fresh water and so if you are doubtful as to the variety or quality of the oak you can get hold of, be safe, and use yellow pine.

The stem will be made from white oak or hackmatack sided 1¾ inches and moulded as shown on the construction plan. There are several other varieties of wood that can be used successfully for making the stem. Among these are apple wood, yellow pine and

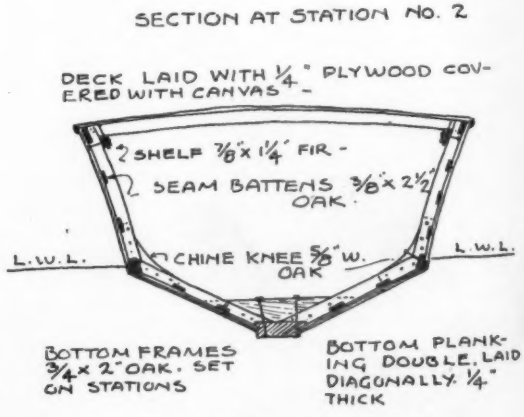

SECTION AT STATION NO. 2
DECK LAID WITH ¼" PLYWOOD COVERED WITH CANVAS -
2 SHELF ⅞"x 1¼" FIR -
2 SEAM BATTENS ⅜"x 2½" OAK.
L.W.L.
CHINE KNEE ⅝" W. OAK
L.W.L.
BOTTOM FRAMES ¾"x 2" OAK. SET ON STATIONS
BOTTOM PLANKING DOUBLE, LAID DIAGONALLY ¼" THICK

Fig. 2, *A Section of Station* 2

pear wood, the former and latter being easily gotten in natural crooks.

The stern will be planked with ⅜ inch white cedar over an oak frame. The frame must be sawn from heavier stock or else steam bent so as to come to the crown indicated on the plans. There will have to be a post up the center of the stern and two vertical members either side. Since the seams of the planking will be battened these must be let in flush with the after face of the stern frame. Battens will be made from ⅜ by 2 inch oak. There will be two battens, which means three planks for the stern. Brass screws will be used for fastenings.

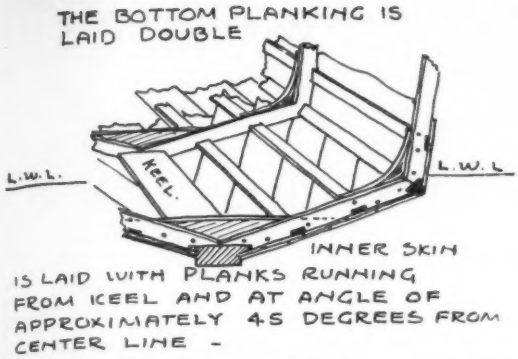

THE BOTTOM PLANKING IS LAID DOUBLE
L.W.L.
KEEL
L.W.L
INNER SKIN
IS LAID WITH PLANKS RUNNING FROM KEEL AND AT ANGLE OF APPROXIMATELY 45 DEGREES FROM CENTER LINE -

Figure 4, Shows the diagonal and fore and aft planking on the bottom

The stem will be fastened to the keel with three brass bolts about ¼ inch in diameter and these will need to be countersunk into the face of the keel. Be sure to make a good job of the joint between the stem and the keel.

The stern board will be fastened to the keel with a metal knee as shown, using bolts for fastenings.

The frames, of which there are six, will be made from ¾ by 2 inch white oak. The bottom and the side frames are all made alike and are fastened at the corner of the chines with ⅝ inch oak knees, these to be fastened with brass screws using at least three screws to the end of each frame. The frames must be very accurately made from the laying down plan. Despite the greatest care in laying down and making the frames somehow there is always one that will not line up properly. The cutting for the battens and the chine pieces had better be done after the frames have been set up along the keel.

The floor timbers will be made from ¾ inch white oak and these will be fastened to the heels of the frames with brass screws using No. 10's about 1¼ inch long.

Figure 1 gives an excellent idea as to the way the completed frame will appear.

The chine pieces will be made from 2¼ by 2¼ inch yellow pine and must be in a single length. A rabbet must be cut both for the side and the bottom planking. For the side planking this will be ⅜ inch deep and for the bottom ½ inch. Bevels for the rabbet must be gotten from the full size laying down plan. See how often reference is made to this? At the bow the chine pieces will be halved into the stem, and at the stern the ends will be let into the stern frame but not the stern planking. Use brass screws for fastenings.

Figure 2 shows a section through Dragonfly at

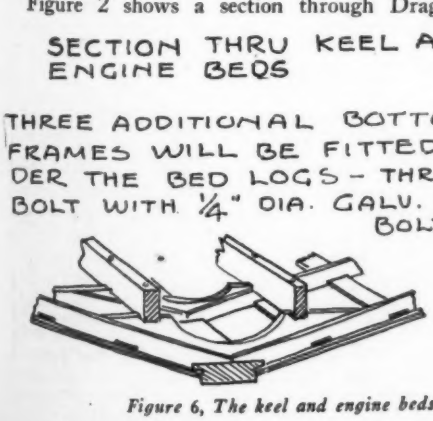

SECTION THRU KEEL AND ENGINE BEDS
THREE ADDITIONAL BOTTOM FRAMES WILL BE FITTED UNDER THE BED LOGS - THRU BOLT WITH ¼" DIA. GALV. IRON BOLTS.

Figure 6, The keel and engine beds

station 2; this gives a very good idea of the way in which the various members are assembled.

The seam battens will be the next item to make and fit. These will be made from ⅜ by 2½ inch white oak. Now since there are four planks on each side above the chines there will be three battens. The center of the battens will come under the plank seams. On the topside the seams of the planking must run in fair lines. The way in which to arrive at the plank widths at the various frames is to divide the distance from the chine to the sheer into four equal parts on every frame; then run a batten through to make sure the lines look right.

The side planking will be made from ⅜ inch white cedar. It will be fastened to the frames with No. 8 brass screws about 1 inch long. These fastenings must be closely spaced, say about 2 inches center to center. Along the battens the fastenings will also be brass screws using No. 6's about ⅝ inch long. In fitting the plank seams cut a slight bevel, leaving the face of the planks tight and the back slightly open. As each plank is fastened run a few strands of cotton wicking in the seams soaked with paint. Then pull the planks just as closely together as possible, making the tightest kind of joint.

Smoothing off planking laid in this manner is accomplished by filing and sanding. Because of the screw heads it is impossible to plane the surface.

Figure 3 shows how the side planking looks from the inside of the boat.

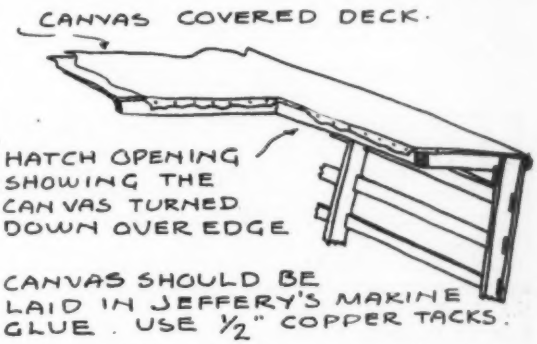

CANVAS COVERED DECK
HATCH OPENING SHOWING THE CANVAS TURNED DOWN OVER EDGE
CANVAS SHOULD BE LAID IN JEFFERY'S MARINE GLUE. USE ½" COPPER TACKS.

Figure 5, The canvas deck covering

The bottom planking will be laid in two thicknesses, each of these being ¼ inch thick. The inner skin will be laid so that the planks extend from the keel leading out and aft at an angle of roughly 45 degrees from the center line. In order to give, or rather to prevent, the planking from bulging between the frames it would be well to run one or two battens through the bottom as shown, these to be the same dimensions as those in the topsides. The first skin will be fastened with as few screws and brads as possible, just enough to hold the planks in place. The outer skin will run fore and aft and will also be ¼ inch in thickness. The first plank to apply will be the one next the keel, the garboard. Do not shape the bottom planks, rather allow these to run as nearly straight as possible. There should be about four planks each side the keel. The fastenings will be brass screws, No. 6's, about 1 inch long and spaced as directed for the side planking. As each plank is fitted paint between it and the inner skin with Jeffery's liquid glue or paint.

Figure 4 shows the way the double planking will look from the inside of the boat.

(*Continued on page* 74)

SMALL MOTOR BOATS

Their Care, Construction and Equipment

A MONTHLY PRIZE CONTEST CONDUCTED BY MOTOR BOATMEN

Questions Submitted for the October Contest

1. Describe and illustrate the installation of a reverse gear and give suggestions for maintaining and operating same to insure satisfactory and reliable performance.
Submitted by L. R. K., Philadelphia, Pa.

2. Explain and illustrate an approved method for the amateur to locate and mark the waterline on a boat.
Submitted by W. B. M., Newburgh, N. Y.

GETTING LINES TO A DISABLED BOAT

Rescue and Towing Methods Which Will Prove Useful in Getting a Boat Out of a Ticklish Situation

Answers to the Following Question, Published in June MoToR BoatinG

How would you get a line aboard a disabled boat in bad weather and what method would you use in towing the boat to port?

SMART WORK NECESSARY
(The Prize-Winning Answer)

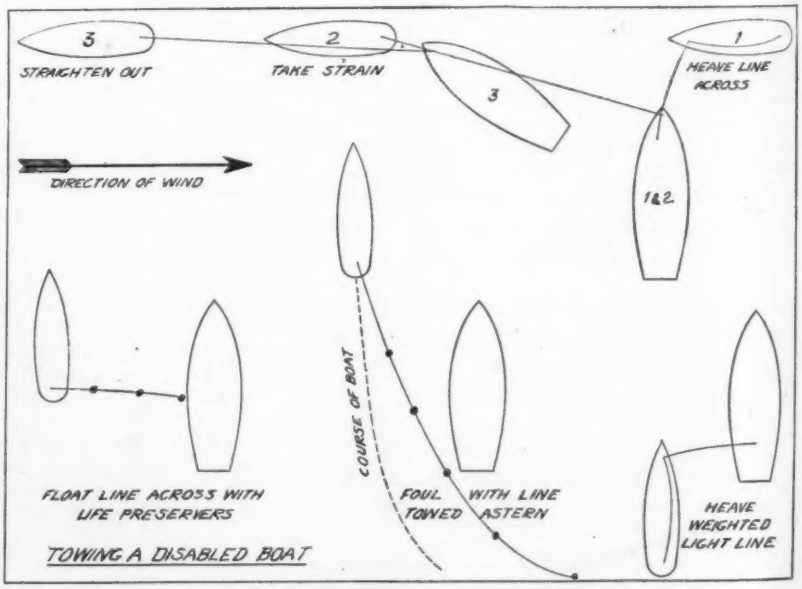
HEAVING a rope is the sailor's favorite method to get a rope's end from one place to another. If the rope is too big to be handled readily in this manner, he heaves a light line and when that has reached its destination, he attaches the heavier line to the lighter line and the rest is simple.

Heaving a rope aboard a disabled craft in a heavy sea can be accomplished with little difficulty provided the moving boat maneuvers to a point to the windward of the boat in distress as indicated in Fig. I.

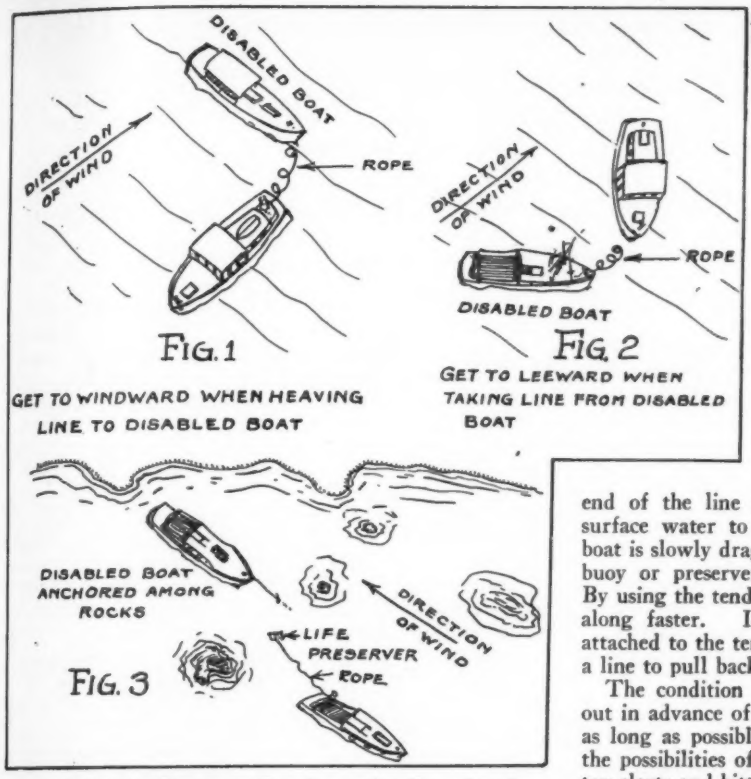
As will be seen, the helping boat is head into the wind, offers the least resistance to the wind, whereas the disabled boat offers the greatest resistance to the wind. It will be an easy matter for the helping boat to thus approach near the other boat with all the possibilities in the world of pulling away from the other boat should both come too near each other.

When the man, heaving the rope, is standing at the stern and with the wind at his back, there will be every condition present to warrant his getting a tow line aboard. He should hold the reserve portion of the rope at his end for several reasons.

The man on the broken down boat will not want to have an excess of line around his feet. His position on the boat is both unstable and precarious. If he can get the line fast to the forward bitts, the man in the towing boat can handle things much more satisfactorily. Being within easy earshot of the helmsman of his own boat, he can better gauge the strain to be allowed on the towline as he receives word from the helmsman as to what the towing boat is about to do.



W. B. M., shows how to approach, secure, and tow a disabled craft



J. E. M., offers suggestions for getting lines aboard a cripple under various conditions

Sometimes, a boat beginning to tow another, as in this case, responds slowly to her helm. Caught just right by the wind and the waves his craft will not heed her helm. If the towing line is left free for a few seconds until the helmsman can get his boat straightened out, he will experience no further trouble. To get this simple help from the man on the disabled boat would be difficult under the circumstances.

The majority of disabled boats of the smaller type are manned by inexperienced crews—that is one reason why they are in jeopardy. Hence, the less expected from them in the way of co-operation the better. It is even advisable to heave a towline to such parties with a bowline tied in the end of the rope ready to be dropped over the bitts of their boat.

If the reverse of the conditions discussed should happen (Fig. 2) a case wherein the helping boat must take the tow line from the helpless craft, then the rescuers must get to leeward in order to give the man heaving the line the advantage of the wind at his back. In this case, the helping boat should be in reverse and going astern when the line is received from the other boat.

In the open sea, the situation is one which does not carry with it the dangers which accompany that shown in Fig. 3. Here the disabled boat has drifted among the rocks, but the anchor is holding her, at least for a while, just clear of the surf and the shore rocks.

The rescuing boat must necessarily keep a respectful distance, one too great for the successful heaving of even a light line. The line can, however, be floated to the other craft by attaching a life preserver or a ring buoy to the end of the line and allowing the wind and the surface water to carry it along. If the disabled boat is slowly dragging her anchor, the floating ring buoy or preserver may not progress fast enough. By using the tender instead, the line will be carried along faster. In this case two lines should be attached to the tender, one a tow line and the other a line to pull back the tender.

The condition in towing a disabled boat stands out in advance of all the others—have the tow line as long as possible. A short towline, disregarding the possibilities of its parting under the strain, will tax cleats and bitts. It will cause jerks on the line, which in a heavy sea may be disastrous to both boats by rendering them unmanageable.

If the seas will permit, take them quarteringly, for pitching head on into the seas will retard progress. If one can run before the seas, it will be well to take a tip from experienced captains who maintain that, left to herself, a boat will wallow with her quarters to the seas. It stands to reason that a slow wallowing towing speed will be aided when both boats can take the seas on their quarters.

J. E. M., Norwich, Conn.

TOWING A DISABLED BOAT

A DISABLED boat in fair weather is not a very difficult proposition. Very likely someone will come along to tow the boat to port or take word in that you are disabled. If you must wait, drifting with the tide towards port or lying to the anchor will not be troublesome. In rough weather, a boat out of control is, to say the least, rather uncomfortable. Well informed authorities differ upon the seriousness of the situation of a boat *(Continued on page 102)*

RULES FOR THE PRIZE CONTEST

READERS are urged to consider the above questions for the October issue, and send answers to them to the Editor, MoToR BoatinG, 57th Street at Eighth Avenue, New York, N. Y. Answers should be (a) in our hands on or before August 25, (b) about 500 words long, (c) written one side of the paper only, (d) accompanied by the senders' names and addresses.

The names will be withheld and initals used.

QUESTIONS for the next contest must reach us on or before August 15. The editor reserves the right to make such changes and corrections in the accepted answers as he may deem necessary.

The prizes are: For each of the best answers to the questions above, any article or articles sold by an advertiser advertising in the current issue of MoToR BoatinG of which the advertised price does not exceed $25 or a credit of $25 on any article which sells for more than that amount. There are two prizes—one for each question—but a contestant need send in an answer to only one if he does not care to answer both.

For answers we print that do not win a prize we pay space rates.

For each of the questions selected for use in the following month's contest, any article or articles sold by an advertiser advertising in this issue of MoToR BoatinG of which the advertised price does not exceed $5, or a credit of $5 on any article which sells for more than that amount.

All details connected with the ordering of the prizes selected by the winners must be handled by us. The winners should be particular to specify from which advertisers they desire to have their prizes ordered.

PRACTICAL METHODS FOR CUTTING RABBETS

Methods Suggested by Clever Readers Explain How This Difficult Boat Building Task Can Be Done to Insure a Good Job

Answers to the Following Question, Published in June MoToR BoatinG

Explain and illustrate a practical method for the amateur to lay out and cut the rabbet in the stem and keel

CUTTING THE RABBET

(The Prize-Winning Answer)

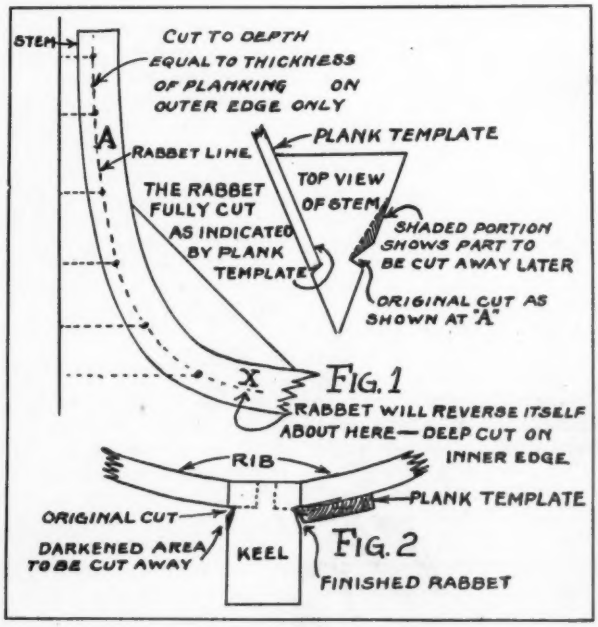
JUST about the time the amateur boat builder gets under way with his boat he strikes a snag in cutting the rabbet. If he does not understand the system and is not mechanic enough to figure it out, he either gets help or gets stuck. The rabbet is the notch in the stem and the keel into which the ends of the planking fit. It begins at the top of the stem and extends downward, not quite parallel with the forward edge, and sweeps a curve to the keel where it runs parallel or nearly so, ending at the stern. To cut the rabbet so true that all the planks fit perfectly is a nice job for the experienced boatbuilder and the novice must work with the utmost care and exactness. However, don't think that because you have never cut a rabbet the work is beyond your ability. If you can handle the common woodworking tools you can cut the rabbet.

We will take the cutting of the rabbet in the keel first as it is simpler and more easily explained. An understanding of this part of the work will simplify the more difficult operation of cutting the rabbet in the stem. As most amateurs are not familiar with the method of laying down a boat (the process of drawing out her lines full size on the floor), we will work by what the vocational training instructor would call the cut-and-try method.

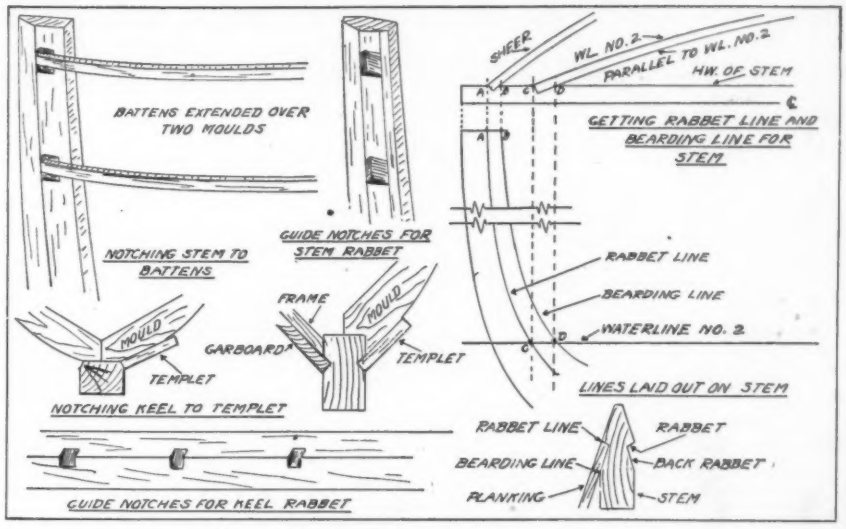
With the stem and keel assembled and set up, and the moulds in place, the proper bevel for the rabbet can be easily obtained. From the planking material or any soft wood the same thickness cut a piece about a foot long and about half the thickness of the planking in width. By using this thin piece for a templet there will be no danger of it being used in other than its proper position. The templet should be slightly beveled toward the side next the frame, so that the rabbet will have an outgauge. The outgauge causes the planking to wedge tighter as it is drawn up in the rabbet and gives a good calking seam. By holding the templet against each mould and chiseling the keel until it fits the templet, you will get a series of spots as guides. Then by springing a batten fair between these spots and marking along the edge you get the finish line of the rabbet. Draw a similar line on the upper edge of the keel and cut away the wood to these lines, using a chisel or draw knife and smooth with a plane. Should the keel extend up into the boat, the method of laying out would be the same, but you would have to use the chisel or rabbet plane to do all the cutting. Cutting the rabbet in a flat keel is nothing more than beveling the edges to the lines joining the notches cut to the templets and is practically as easy with the moulds set as without. Only a short distance each side of the moulds must be cut with the chisel. If the half breadths are laid out, the bevels can be taken from the floor on a templet and the rabbeting done on the bench.

As you approach the bow where the boat becomes sharper and the sections stand more vertical, the rabbet changes until at the stem or stem knee the rabbet becomes a notch with two faces. The edge against which the plank butts is called the rabbet and the other edge against which the flat of the plank comes is the back rabbet. On all parts of the stem the templet must be applied horizontally but, instead of the short templet, a batten extending aft over two or three moulds, so that it takes a fair curve, should be used. In this manner the back rabbet will receive the exact bevel necessary to fit perfectly against the planks when they are fastened in place. Chisel out several spots along the stem, having them closer at the bottom, then fair on the rabbet line and the bearding line with a batten and chisel out to these lines. It is safer for the novice to cut the rabbet a little shy of the full depth, rather than cut it too deep, for you can easily take off a shaving or two when the planking is put on. Fitting a shim under a plank to make it come flush with the stem is one of the sins of boatbuilding. In the right place a shim will cause a leak hard to locate and harder to make tight.

Cutting the stem rabbet after the frame is set up is an unsatisfactory job at the best, especially in light boats. On a heavy stem, well braced, it is not so bad.



J. E. M., shows some thoughts for laying out and cutting a rabbet



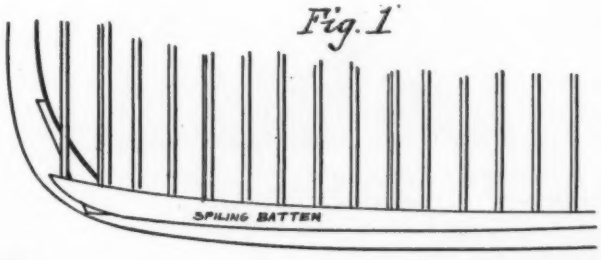
W. B. M., explains the rabbet cutting process very carefully

It would seem more practical for the amateur who has not the boat laid down to bolt up the stem and make the guide cuts, after which the stem is unbolted and the rabbet cut on the bench. If you have the boat laid down on the floor, the laying out and cutting of the rabbet is much easier, in amateur hands, the result will be equally as good if not better. Cut out the stem and rivet or bolt it to the stem knee or deadwood. On the floor you have waterlines drawn, say, every six inches apart. Lay the stem on the floor and mark these waterlines across it. The waterlines show the exact bevel at the stem, at each of the several levels. By drawing on the floor a line parallel to the center line and a distance equal to half the thickness of the stem from it, the line will cross each waterline. Beginning at the outer line representing the sheer, measure the distance from the face or forward edge of the stem to the point where the line representing the half width of the stem and the waterline intersects and you have one spot for the rabbet line. Transfer this distance to the stem and repeat at each waterline. Use dividers for transferring the distances. A batten sprung fair through these spots will give the rabbet line.

To get the bearding line, which is the line of the back rabbet, the process is much the same, except that allowance should be made for the thickness of the planking. Draw lines parallel to the waterlines the thickness of the planking inside of them. The point where this line, parallel to the waterline, intersects the half width of the stem, gives a spot for the bearding line. A line faired through the spots, obtained in the same manner at each waterline, completes the laying out of one side. For the other side the spots may be transferred by using dividers, working from the face of the stem. You now have two lines to which to chisel the rabbet, into which a piece of the proposed planking will fit and come flush with the side of the stem at the rabbet line.

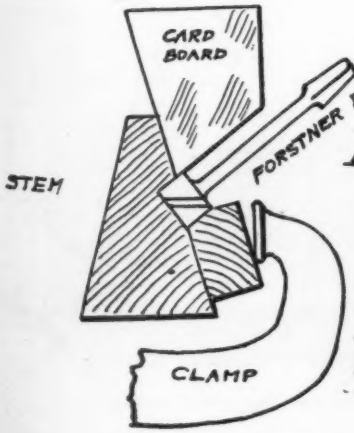
A point to remember in cutting the rabbet is to have the notch with an outgauge and not beveled under. The outgauge causes the plank to wedge tighter as it is fastened into the rabbet. As the planks are bent around, the outgauge allows them to jam tightly into the rabbet and, later, calking is driven into the seam. If the seams were beveled under as is usual in woodwork on buildings, the cotton would be driven through the seam and would lie loose, for the seam is hollow where there should be backing.

Fig. 1



Anyone who considers seriously the building of a boat will have the necessary tools with which to cut the rabbet. Owning the tools and being told how to do it is not enough. To succeed you must have had a certain amount of experience in using the tools. Otherwise, the boat will be a failure. A chisel and a mallet are all the tools necessary for cutting the rabbet and all that you can use in cutting the stem rabbet. You will be cutting hard wood so keep the tools sharp. The keel rabbet is more easily cut with a draw knife and a plane, but the work can be done with no other cutting tool than a chisel an inch and a half wide. In rabbeting the stem, first cut along the rabbet line with a sharp knife and then with a chisel. Then score at right angles to the rabbet line and remove the chips. Repeat the scoring and cutting as necessary until the rabbet is cut to the proper depth. Do not overlook the outgauge. The scoring greatly facilitates the removal of the wood, but it must be done carefully so as not to score over the bearding line. The scoring also makes it possible to cut across the grain, (*Continued on page 94*)

Fig. 2



J. F. S., shows an ingenious way of cutting a notch with a Forstner bit

YARD AND SHOP

Notes of Interest to Both Owner and Manufacturer

NEW SCHOONER STARTS LONG CRUISE

AFTER a shake-down cruise from San Francisco to the West Coast of Mexico, the powerful auxiliary schooner Zaca passed through the Golden Gate, June 7, bound on a long swing through the South Seas, carrying her owner, Templeton Crocker of San Francisco and a party of friends.

Zaca is one of the finest pleasure craft ever built on the West Coast and one of the largest. She measures 118x96x 23x14 feet and accommodates 23 persons, including the crew.

Oak frames, fir planking, teak deck houses and trunks and interior woodwork of primavera, the big two-sticker is typical of the most advanced ideas in yacht building. Under bare poles she has an average cruising speed of 11 knots, her main engines—two 120 h.p., 6-cylinder Hill Diesels—driving twin screws at 650 r.p.m. Two 11 h.p. Diesel auxiliaries are hooked up with generators for operating the electric sail hoists and windlass and furnishing current for the lighting system. Fuel tanks have a combined capacity of 3,000 gallons.

Zaca was built by Nunes Brothers of Sausalito, California.

The schooner yacht Zaca, outward-bound on a South Seas cruise

MISS COLUMBIA HAS NEW OWNER

The New Jersey Gold Cup Association announces the purchase of the Gold Cup veteran, Miss Columbia, by Theodore E. Hall, who has entered her in the 28th Gold Cup Races under the flag of the Red Bank Yacht Club. The Red Bank Yacht Club in this way matches the Columbia Yacht Club in entering a second Gold Cup boat as a runner-up or team-mate of their principal entry. It was announced some time ago that Victor Kliesrath had purchased and was fitting up the old racer, Hotsy-Totsy, as a running mate for Imp and Mr. Kliesrath has since announced definitely that he will personally race Hotsy-Totsy.

Miss Columbia has been put overboard at the Banfield plant at Atlantic Highlands, New Jersey, for trial runs to decide whether steps are to be added as in the case of Hotsy-Totsy. Miss Columbia still holds the record for the fastest lap made under the old displacement rules under which she attained a speed of 47.8 m.p.h. She is powered with a new Packard Gold Cup motor and even without steps will undoubtedly finish in second or third place, if she shows the consistent running she has shown in the past.

Theodore E. Hall, the new owner, is president of the oldest chain and anchor business in New York, William A. Hall's Son, Inc., 120 Broad Street, which was founded in 1837 by Mr. Hall's great grandfather.

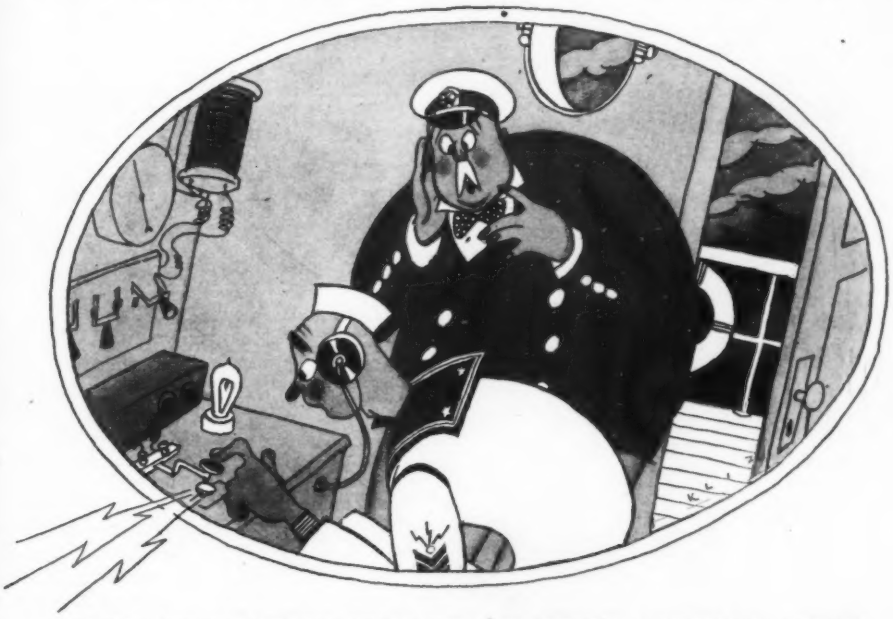
Mr. Hall was an aviator during the war and while he has always been most active in boating circles, this marks his initial entry into the Gold Cup Class.

COMMITTEE CHAIRMAN BUYS YACHT

Edmond Lang, ex-commodore of the Manhasset Bay Yacht Club, and chairman of the International Race Committee of the New York Yacht Club, in connection with Sir Thomas Lipton's challenge for America's Cup, has purchased the triplicate of the 57-foot Elco twin-screw cruiser yachts known as the Oyster Bay Twins, and owned by Fred G. C. Lyon and Colgate Hoyt.

Tide and Altair, twin 57-foot Elco yachts recently purchased by Colgate Hoyt and Edmond Lang of the International Race Committee

O-V-I-N-G-T-O-N'S . . . S-O-S



SEND OUT SOME SMART SERVING THINGS! SEND OUT SOME SMART SERVING THINGS! OUR SHIP'S NOT FLOUNDERING BUT SKIPPER'S REPUTATION AS A SEA-GOING HOST IS SINKING IN THE EYES OF HIS DINNER GUESTS! (*Signed*) SPARKS.

MISTER, you're proud of that rakish lugger of yours. You want it right as a trivet from keel to top gallant, from the sheen of its brass to the tilt of your visored cap.

And certainly you want sea-going china and crystal . . . china born to the wind and the wave . . . crystal that takes to the great salt spaces like a whale's progeny or a fledgling gull.

These are the services you'll find at Ovington's . . . nautical and nice. Every piece made to your order and delivered alongside two weeks after the design is approved. For as little as $63 you can choose a china service for six, decked and emblazoned with your club and house flags. And for even less you may snare its matching crystal. Toss your derelict goblets to Davy Jones and send for the man from Ovington's.

OVINGTON'S

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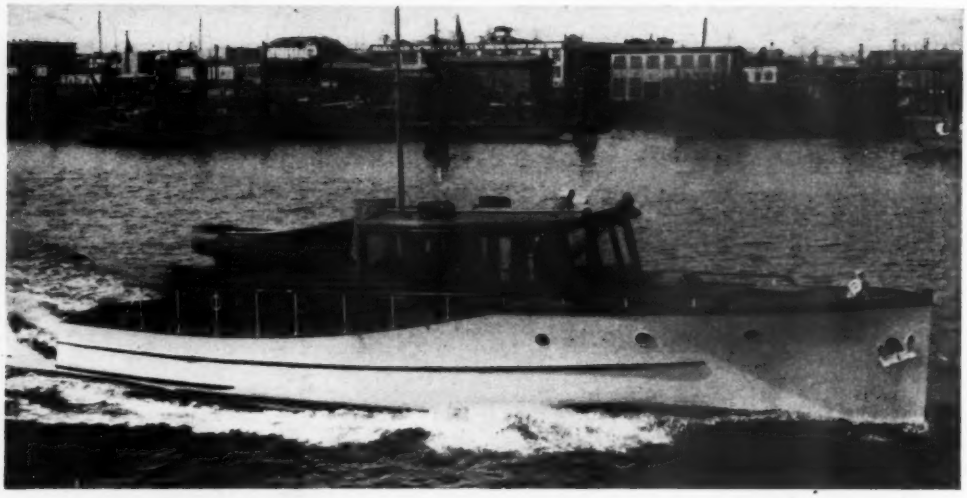
437 FIFTH AVENUE

NEW YORK, N. Y.



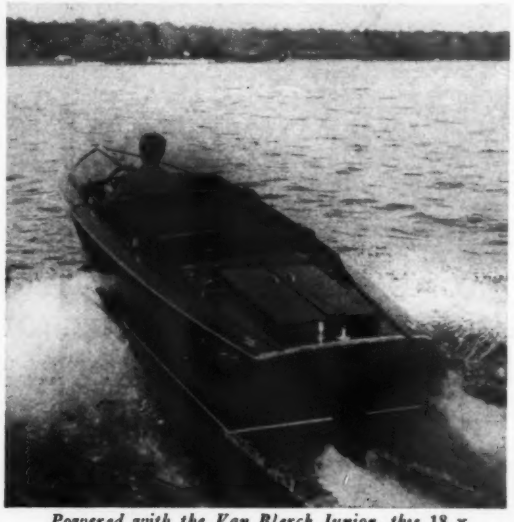
Natomah, a sturdy 45-foot West Coast cruiser, powered with twin six cylinder Red Wings

Lang, who is the the owner of the New York 30 racing yacht Banzai, formerly used the Elco 38 cruiser Altair as tender. With his appointment as Chairman of the Race Committee, Mr. Lang felt the need of a larger yacht as tender, on which he could live comfortably off Newport or in the Sound, over the period of the cup trials and during the challenge races.

How Mr. Lang happened to choose his new Elco 57-foot yacht is an interesting yarn, beginning back in 1909 when Fred G. C. Lyon purchased a 55-foot Elco.

In 1911, Mr. Lyon purchased a 65-footer, Bettina. In 1927, he used a 34-foot cruisette named Spindrift, and liked it so well that he prevailed upon his friend, Colgate Hoyt, to purchase its duplicate, named Tide.

From that day to this, the Seawanhaka-Corinthian Yacht Club at Oyster Bay has always had a Tide and Spindrift in its fleet, known as the Oyster Bay Twins.

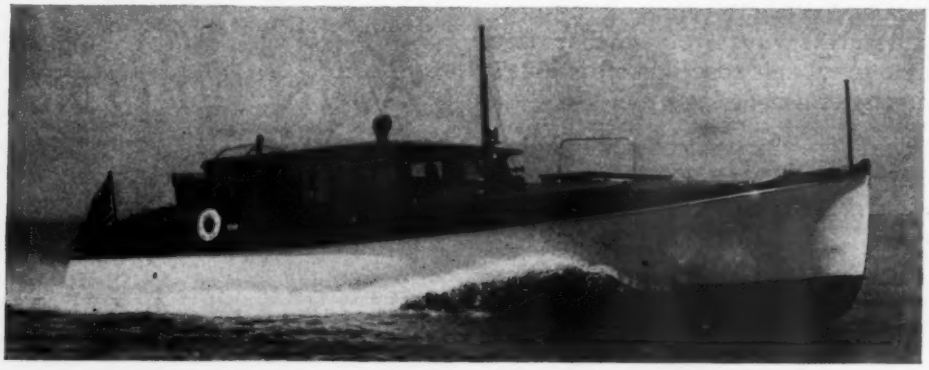


Powered with the Van Blerck Junior, this 18 x 5-foot runabout built by the Claus Engelbrecht Yachtwerft, Berlin-Copenick, makes 25 m.p.h.

The following year the two 34-footers were exchanged for Elco 38's and the year after that they were in turn exchanged for special twin-screw 42-foot cruiser yachts. Invariably, the companion cruisers have been named Tide and Spindrift, moored in Oyster Bay, and cruised together.

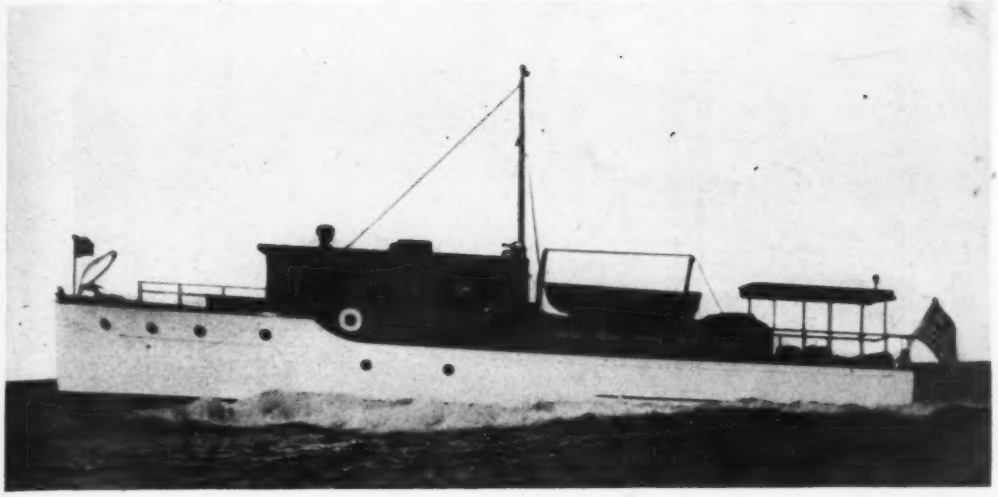
For this season, Mr. Lyon and Mr. Hoyt ordered two special Elco 57-foot twin-screw cruising yachts. When the latter, who was also serving on the International Race Committee with Mr. Lang, heard that the chairman was seeking a larger craft he told him about the new Tide and Spindrift. Mr. Lang became enthusiastic over the plans and features of the 57-footers and placed his order for the triplicate, which was delivered to him just in time for his use during the first New York Yacht Club Trials.

(*Continued on page 76*)



A Sterling-powered 46-foot Matthews cruiser, to be used this summer by W. D. Howe in New York waters

AWAY . . . .



In a Vinyard yacht! Sure of speed and security. Rough weather and running seas are but the occasion for a romp.

The Vinyard is sturdy and seaworthy and beautiful. For the Vinyards know the sea. And they know boat building. And they know that honest construction is the very best of good business.

Try the Vinyard 50 or 55 twin screw in rough weather. That will convince you of its incredible smoothness, its extraordinary steadiness. Wire for demonstration. Catalogue on request.

And look at the price

The 50 - $23,500 **The 55 - $27,500**

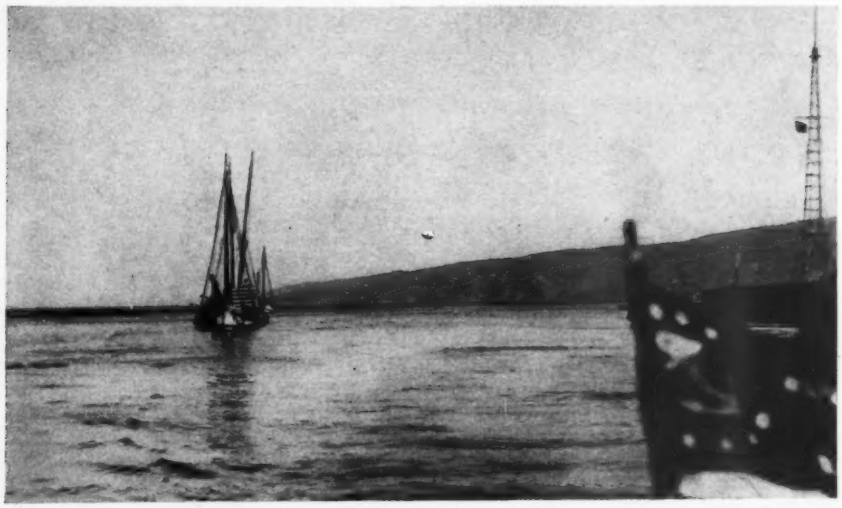
Fully equipped and ready for a romp!

When you are tired of the ceaseless VIBRATION, and wonder if a shock absorber could be made for a boat, think of a VINYARD yacht with its one piece WHITE OAK KEEL. IT IS THE ANSWER.

A VINYARD 50 at full speed. Note: smoothness of wake; built-in beauty and strength that only long experience and established reputation can assure, which means absolute seaworthiness, incredible smoothness at every speed; ease of handling; twin screws; steadiness in rough water; and comfort as the governing factor in the design and construction.

VINYARD Ship Building Company

Milford, Delaware



The kaikis ceased circling about their rudders and followed Hotspur into the Corinth Canal

AN AEGEAN CRUISE

(*Continued from page* 34)

Vatti Building in Piraeus, who has a 30-ton Bristol Channel cutter for charter at $600 a month. She is completely appointed, is powered with an auxiliary motor, and is ideal for a party of four who wish to carry a crew and be relieved of the duties of sailing and piloting. The freight paid for Hotspur eastbound seems rather excessive at $645, but we have been quoted a rate of half that sum for the return voyage. Through my good friend, Ed Tucker, insurance agent and secretary of the Cruising Club of America (whose pennant Hotspur proudly flies) I obtained a policy at three per cent covering the little ship during loading and unloading and both passages across the Atlantic. This brings the total cost of shipment up to $1,200 and if we cared to cruise for two months instead of seven weeks the figure would match the charter price quoted by Harrison.

Our preference between the two methods of cruising in foreign waters is self-evident. We know Hotspur and are more confident of her ability than we could be of a chartered boat. She is loaded two or three inches below her waterline with American canned goods, spare gear for almost every emergency, cruising clothes, fresh drinking water, lubricating oil, and is, in fact, almost as independent of the country in which she is cruising as a whaler bound for the Antarctic. When we unloaded her from the steamer we had only to rig her, buy gasoline, oranges, eggs, potatoes, and wine, and shove off. Although insured while in the hands of the transportation company, she is not covered for her rambles among the islands. The reasons for this lack of coverage are two. First, even the best rate seemed excessive. Second, we figured that if she should unhappily prove a total loss on the bold cliffs of the Aegean Islands we would find ourselves in a blissful realm where insurance indemnities are not paid; whereas the difficulty of proving and collecting for any small damages would outweigh the cost of paying them ourselves.

A few more words in parenthesis and we can start the cruise. When I learned of Harrison's existence in Piraeus I wrote asking him if we could have mail forwarded to him and whether we could leave Hotspur's cradle in his care while we were cruising. He replied in the affirmative and offered to receive the cutter for us and clear her through the customs. But to this I made no reply, for I entertain the belief that a man may successfully transact his own affairs in foreign lands on the basis that ignorance is not only bliss but a positive advantage. Didn't the doughboys travel free on leave all over France merely by saying "No compree?" And on the other hand, didn't the wise ones, who spoke French and were proud of it, pay for everything they got?

In shipping Hotspur to Greece I didn't plan to get anything for nothing. But I did anticipate alternating a pleasant smile and a blank expression and by so doing thread the tangles of official red tape without discomfort. So it proved. We arrived in Athens two days before Hotspur, and when first we met Harrison he told me very plainly what I hadn't done that I should have done. I should have marked her bill of lading "In transit" to avoid customs difficulties. I should have added, as he had instructed me, "*Soto plango*," which would eliminate the imposition of extra fees for unloading her. As I had not done these things he was very gloomy about the prospects.

The next morning when I knew that the steamer was in port I asked Harrison to let me clear her myself. He agreed to, and came along to the office of the Export Line in order, I think, to see the fun. The local manager of the line was kindness itself. He hadn't known until that minute that I was in Greece, Hotspur was already in the water, and he was more than relieved to find that she had an owner. He loaned us his customhouse broker who spoke French but no English, and we went to the captain of the port to explain the situation. The port captain saw how dumb I am in Greek and French and forthwith decided to make my lot no more pitiable. There would be no formalities, he said, beyond a letter from the American consul stating that Hotspur was mine and entitled to the protection of the American flag. We went to the customhouse chief and for a moment I trembled when Harrison whispered that the chief was referring darkly to the finance minister. That sounded to me like a heavy bond or import duties, but I managed to pump up an ingenuous smile and turn it on the chief. He saw it, got out a huge black book, learned (as I suppose) that no case similar to Hotspur's had occurred in 4,000 years of Greek history, and decided that a letter from the consul saying that I intended to return Hotspur to the States was all I needed. Wherefore, as a result of a few words in English spoken to the genial manager of the Export Line and volumes not spoken in Greek or French I was free to cruise the islands without hindrance. The following morning P. L. and I secured the necessary letters from our consul, and the next day I was given a bill of health which gives us free *entree* to all the ports of Greece.

But wait a minute. In my desire to prove the simplicity of doing business on the basis of "No compree," I have almost omitted the keystone to our own particular case. This is a letter, imposingly stamped in red, written by M. Simopoulos, Greek minister at Washington. In the Greek language it asks the representatives of the Hellenic democracy to accord Alfredo Loumes and his wife every courtesy. This document, plus (I insist) the dumb look and the pleasant smile, permitted Hotspur to sail way from Piraeus less than forty-eight hours after her mast was perilously stepped.

On May 28, then, at 12:40 of the clock, I fiddled with the engine controls, pressed the starter button, and the motor buzzed away with the drone of a bee. We said goodbye to Harrison, paid off Nikolas, the honest watchman who had guarded Hotspur continuously for two nights and a day, waved to our friends in the harbor master's office, and stood out of the crowded harbor. We did not look back to see whether the magnificence of the Athenian Acropolis would come into view as we cleared the wharves. We did not even look back to see that the dinghy had gone adrift. But vociferous shouts from the crews of a dozen steamers informed us of our bereave-

(*Continued on page* 70)

Outboard Motors Corporation's *New* Four Cylinder Racing Sensation

4-60

$3500 *for* 50-55-60 Miles *per* Hour

THE flash of an orange-colored fuel tank . . . . the hum of 45 horsepower . . . . a boat flies past at express train speed. The crowds on shore and the drivers behind don't need a stop watch to tell them that records that once seemed secure are going a'tumbling.

At regattas from coast to coast, "4-60", newest four-cylinder racing achievement of Outboard Motors Corporation, IS a sensation! Nothing before has been so powerful, yet "4-60" weighs no more than smaller four-cylinder outboards. Light boats fairly *fly* over the water, but with unbelievable steadiness due to a 15 inch steering fin on the housing. Easy-rolling ball and roller bearings put maximum power at the wheel. The rotary disc valve is *gearless* and integral with the large case-hardened crankshaft of chrome nickel steel. Flywheel is steel, drop forged and precisely balanced. Ignition is closed-circuit battery type.

Sold by
EVINRUDE
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Dealers throughout the World

OUTBOARD MOTORS CORPORATION

Many July "4-60" victories include:

WINNER UNLIMITED RACE; also first and second class F, Division III, Albany, New York, July 6.

WINNER OF EVERY FREE-FOR-ALL at Biloxi, Pass Christian and Bay St. Louis in Gulf Coast Circuit Regattas, July 10-13.

WINNER FREE-FOR-ALL, Madison, Indiana, July 4; Hub Meyers, driver. Auspices Mississippi Valley Power Boat Association.

WINNER 5-MILE FREE-FOR-ALL, Rochester, New York, July 6; James Westcott, driver.

NEW WORLD'S RECORD Class F, Division II mile trials, Westerly, Rhode Island, July 6; Ken Mackenzie, driver.

Ole Evinrude, president of Outboard Motors Corporation, offers $3500 in cash or trophies of equivalent value for first drivers of "4-60" to make 50 miles per hour in competition, first 55 and first 60 miles per hour in time trials and competition. Write for full details and complete information on "4-60", the year's greatest racing sensation and racing value at $450 f. o. b. factory. *Address: Racing Division, Outboard Motors Corporation, Ole Evinrude, President, 5126-27th Street, Milwaukee, Wisconsin.*

Here is 2¾ H. P. FOLD-LIGHT—handiest, most compact of all outboards. Folds to only 11½ x 13¾ x 17 inches; 7 to 10 miles per hour; only $145 f. o. b. factory.

Outboard Motors Corporation also Builds
29 Pound **FOLD-LIGHT,** *World's Lightest Twin Outboard*

AN AEGEAN CRUISE

(*Continued from page* 68)

ment and we paused a few minutes to pick up the dinghy and knot its painter securely.

Then we passed out of the entrance of the busiest and one of the most famous of all Mediterranean ports, and into the chop of the Bay of Salamis. There we made sail, shut off the motor, and headed west for the Corinth Canal.

The introduction of a limited amount of information is inevitable in a cruise through waters as historical as these, and I hope I shall be pardoned for it. On our Baltic cruise in 1927 I phrased a similar apology and was pained to receive a letter from an anonymous gentleman in Philadelphia who wrote, "Why apologize for mentioning historical events in your writings? They're the only part worth reading." So I feel emboldened to say that our first course in Grecian waters led us to the site of the battle of Salamis, the naval conflict which stemmed the first tide of Asiatic invasion of Europe and was as vital to the hopes of Occidental civilization as the more famous repulse of Attila's Huns.

Here in the narrow strait between the mainland and the barren island of Lipso now peacefully parted by Hotspur's keel, the Greek fleet met and overcame the well-benched triremes of the Persian Xerxes. Between Lipso and the large island of Salamis to the south other naval ships to the numbers of hundreds hurled themselves against one another on the September day 2,410 years ago, while Xerxes himself sat on his throne on a high hill and awaited the outcome with eager anticipation. He might well expect victory, for did he not know that there was friction between Athens and her Peloponnesian allies? And had he not received from Themistocles, the Athenian leader, the tip that some of the Greeks were planning desertion around Salamis to the westward? Xerxes, having already laid waste the Attic plain and captured the Acropolis, despatched 200 of his ships by night to block the escape of the panic-stricken Greeks, and saw victory written in the ripples of the blue water below him and the clouds of the blue sky above him.

But before the sounds of battle had been long rising to his rocky perch he knew that the day had gone against him. The diversion of his forces had reduced his participating fleet to the size of the Greeks'. The ardor of his minions was not equal to that of the defenders of their homes. By nightfall the shores of Lipso and Salamis were strewn with the wrecks of the Persian fleet and the bodies of their soldiers, and Greece was victorious.

Themistocles came off best in that day of tremendous fighting. He knew that many of the Greeks were unwilling to fight. He knew also that treachery was not uncommon among the statesmen of his time and that Xerxes would readily believe him capable of the evil. So he gave the false tip that weakened Xerxes' forces while keeping the Athenian allies from thought of retreat. Superb though his statesmanship was on this occasion Themistocles surpassed himself on a later one. Finding that the Peloponnesians could not be induced to pursue the retreating Persians to the Hellespont, Themistocles sent exact word to that effect to Xerxes, confident that the great leader of the invading forces would not believe him again. Thus the plain truth following an elaborate lie was as effective as a whole army in hastening Xerxes north.

The opinion of the anonymous gentleman of Philadelphia to the contrary notwithstanding, cruisers do not make good historians in large bunches, and here we have Hotspur close-hauled on the port tack rounding the north tip of Lipso. Abaft her beam is a lateen-rigged single-masted cargo boat that she has just overtaken, ahead is a larger two-masted kaiki which she is outsailing and outpointing, and close to the north shore are several hills where tradition says that Xerxes sat. The day is fair, the barometer is high and steady at 30.10, and the breeze is southwest. A day, a bay, and a boat all made for cruising.

We tacked to weather a black buoy (passed to starboard because we were leaving Piraeus), eased sheets, changed course to northward, and entered beautiful Eleusis Bay. This lake-like body of water, named from the ancient town of Eleusis on its northern shore, is about eight miles in length and two in width north and south, and would be dotted with sail if it were American. But yachting is almost an unknown art in Greece, and its blue surface was bare except for the shadow of a plane flying overhead and the patched sails of a kaiki far away. Around the bay rise in majestic profusion the mountains of Salamis and the mainland—mountains which despite their barrenness give play to the most beautiful blues and purples in their hollows and shadows. The brief plains between the ranges are green with the deep hue of olive groves and yellow or brown with the stand of grain. Smoke rises from the factories at Eleusis, whose tall chimneys obscure the ruins of the ancient shrine.

At Eleusis for untold years were celebrated the Eleusinian Mysteries which began with a torchlight procession from Athens along the Sacred Way and terminated with solemn rites and ceremonies at Demeter's temple. Little now remains of the ancient glories; but the driver who took us to Eleusis by car before Hotspur's arrival showed us, among other things, Pluto's cave, and the subterranean passage through which, he told us, maidens used to pass to celebrate the ascent of Persephone from the dark regions. Recent excavations have brought to light masonry which places the antiquity of Eleusis farther back even than the Mycenean period, but the savants have not yet conferred to give an exact date to the mud bricks that have been unearthed.

As we entered the bay we rounded Leros Island and freshened our wind for the close reach along the north shore of Salamis. We had been warned that the weather is treacherous in Greece, and that white squalls drive down from the mountain steeps and cause great inconvenience and danger to unwary sailors. But here we had a breeze blowing down the slopes in just sufficient strength to put a couple of strakes under and to send us along with a fine purring at the bow. In two hours we had traversed the length of the bay and were close under the mainland, on which we saw a train of the Peloponnesus Railway crawl mysteriously in and out of tunnels. The clatter of its transit came loud enough to remind us that we had said goodbye to such clumsy conveyances. When we drew so close to the shore that we could hear the dogs bark and the hens cackle we put about and began a series of three or four tacks southward through the narrows.

Virtually everywhere in Grecian waters the shores are bold and may be approached without fear of offlying dangers. In fact, so deep is the water alongshore that the matter of finding suitable anchorages has been one of my chief concerns. The chart told me that in the narrows to which Xerxes diverted part of his host before the battle of Salamis could be found good holding ground in two fathoms. Although this crooked place, formed by the interposition of a long arm of the mainland between the two horns of a bay on Salamis, lies less than twenty miles from Piraeus, we determined to make it our first anchorage, in order to accustom ourselves gradually to the depths to come. So, on a wind which faltered as we approached the projecting arm of the main, but obligingly shifted to let us make the best of each tack, we crept over a placid sea. When the lead, from no bottom at ten fathoms, abruptly showed us soft mud at two, we carried on a bit to get inside the edge of the shelf and let go fifty yards from shore.

Now the wind died altogether, and the sun, even at five in the afternoon, shone with undiminished heat, and we spread the awning. There was work to be done below, but the stark beauty of Mount Geraneia, rising 5,000 feet fifteen miles to westward of us, was irresistible, and we sat on deck in the shade of the awning until dark. Even then it was hard to go below, for the lights of the city of Megara flashed on and twinkled almost as fascinatingly as the stars of the cloudless sky. Some peculiarity of the atmosphere induces this amazing twinkling, which I have never seen equalled in lights or stars at home. It is easy to comprehend why the ancient Greeks sat long in the open air, drinking in the mysteries of the evening and exchanging the tales of their gods and goddesses. If ever stars sang in the firmament they do so above the Attic shore and sea.

Wishing to acquaint myself with the vagaries of the wind as soon as possible, I was up frequently in the night to look around. After the calm succeeding the southwesterly, we had a breath from the east which tautened our manila cable and cooled the cabin. Then later a flutter from the north, and toward morning a return of the southwesterly. Getting under way the next day, I was not surprised to find two turns of the cable around the anchor stock.

Here was another day as perfect as the first, for the settled summer weather had ushered itself in three or four days before our arrival and there was no rain in the light clouds hovering over the mountain tops. We started under power, made sail, and as we ran out of the narrows carried a northerly slant for about a mile. That left us, and we started the motor again. Our propeller pushed us at five knots for an hour or so until a southwesterly greeted us, and before I had time to enter that in the log our sails were taken aback and we were heeling as

(*Continued on page* 90)

GRAY "8"

The Mightiest, Fastest, Marine Power Plant per Pound of Weight and Per Dollar of Price Ever Presented—

LAVISH claims were made for the Gray "Eight" when it was announced to the boating public. Claims Gray had never made for any other motor. And the glowing accounts of this mighty power unit in service have proven every claim made for it fully justified.

Gray "Eight" has swept the country and has scored a triumph.

Just get into a boat, Gray "Eight" powered. Know this new speed that literally pushes back the horizon before you and opens new worlds of happy adventure. Touch the throttle and feel the response and flow of power that gives owners a new sense of command of all they survey.

You live but once—live in a boat that makes a minute stretch out into distance. Write for the facts on Gray "Eight."

Gray makes a motor for every boat—20 great models—5 to 140 H. P.

Made in cruiser, cruiser reduction-gear, Hi-Speed and twin opposite rotation models.

140 H. P. with Downdraft carburetor in Racing Type, standardized power for Hacker 24-footer—35 m.p.h.

Develops 129 H. P. in Hi-Speed type.

Is under 60 inches in length. Is only 20 inches high above center of shaft. 3⅛" bore, 4½" stroke.

322 cubic inches displacement.

Weight 810 lbs.

$1115 to $1335, with built-in reduction gear.

MAKERS OF THE GRAY Vee Drive GEAR

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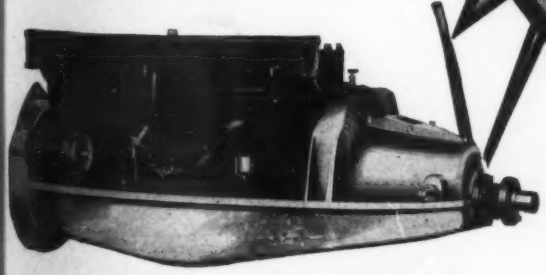


Gray Distributors: Bowler, Holmes & Hecker, N. Y. C.; Johnson & Towers, Philadelphia; The Richard Froboese Co., Seattle, Wash.; Gray Aldrich Co., Boston; Mahon & Gall, Baltimore; Charles E. Smith, Los Angeles; Thomson Machine Co., San Francisco. Others all over the world.

LIGHTING THE SMALL CRUISER

(*Continued from page 56*)

medium sized yachts, but most owners of small boats do not know that lighting plants are being built suitable for the smaller types of boats. It is now possible to buy light portable plants, run by small, one-cylinder, air-cooled gasoline engines, similar to those used on the smaller outboards. These are so small that it is probably possible to find a place for one of them on almost any boat, and as they are made in six and twelve volt sizes they can be used in connection with the starting battery, thus avoiding the necessity for any other battery. One of these plants can be run as frequently as is necessary to keep the battery charged, and there need be no limit on the amount of light used. A separate lighting plant is the only practical method of lighting a sailing yacht or an auxiliary, and will be found most valuable on almost any type of cruising boat.

Six, twelve, thirty-two, and a hundred and ten are the voltages generally used in lighting plants, but hundred and ten volts is only used on the larger yachts as it requires a type of plant that will run all the time that electricity is being used or else a large and cumbersome battery installation. Storage batteries are composed of cells producing two volts each. When these are connected in series, that is, with the negative terminal of one connected to the positive terminal of the other, the total voltage is the sum of the voltages in each. The usual automobile or boat storage battery consists of three cells, and gives six volts. Thus it will be seen that even a thirty-two volt battery is over five times as large as a starting battery. In considering the matter of voltage, a small boat owner should decide whether he has room for a large battery, and whether he can afford to add so much extra weight.

Most motor boats under forty feet can get along very well with a six-volt plant. Above that length, a thirty-two volt plant would probably be better, but that should be considered in view of the use to which the boat is to be put. While in theory there is no reason why a six-volt plant should not be as big as a thirty-two volt plant, in practice it is usual to make the larger plants in thirty-two volts. A large plant will give you more and brighter lights, more fans and other electrical auxiliaries, and if the boat is large enough the extra expense will be found well worth while.

In wiring a boat the general rule is the smaller the voltage, the heavier the wires should be. This seems paradoxical, but is due to the fact that a higher amperage is used with low voltage, and high amperage necessitates large wires. If the same size wire is used in a six volt system that would be proper in a thirty-two volt system, the lights will burn dim when a number are lit, due to the high resistance. Watts, which is the actual power used, is the products of multiplying volts by amperes. Thus, a twenty-five watt lamp will burn four amperes at six volts, two amperes at twelve, five-sixths of an ampere at thirty-two, and a quarter of an ampere at a hundred and ten volts. A two hundred and fifty watt plant will light ten twenty-five watt lamps, whatever the voltage used.

Great care should be taken to keep dampness away from the wires. Ordinary insulated copper wire is perfectly satisfactory where not exposed to extreme dampness, but it does not look particularly good, and should be concealed wherever possible. Stranded auto ignition primary wire is very good in places where it is subject to much wear and vibration. In some cases this is the only wire that can be used. For wiring that is exposed to the weather use either waterproof rubber-covered wire or lead-covered wire. If possible, do not put wiring in the bilges or other places low down in the boat. Where this can not be avoided, lead-covered wire should be used. This is very satisfactory wire for all around use on a boat, as it is waterproof and makes a neat appearance where it has to be run exposed. It can be obtained with two wires run together in a lead covering. Never use smaller than No. 14 wire for any purpose.

Insulating staples are good to fasten the wire to the woodwork inside the boat, but they rust easily, and should not be used where there is too much dampness. Lead, brass, or wood clips are some trouble to use, but are more satisfactory in exposed places. Where lead-covered wire is exposed inside the boat little lead clips, fastened on with round headed brass screws, will give it a very good finish.

Joints should be as few as possible, and should always be located in a position where it is possible to get at them should trouble develop. It is better to solder them, but in any case make a good tight joint, and insulate them very carefully, so as to avoid corrosion. First wind the joint with rubber tape, and then with friction tape. Where joints are exposed to the weather they should be shellaced. All wiring should be well insulated from contact with pipes, tanks, or other metal work, and care should be taken that wiring subject to vibration is in a position where it will not chafe.

A great many people think they must use large and elaborate switchboards. As a matter of fact, on a small boat a switchboard of any description is usually unnecessary. A small fuse box is, however, advisable. Run two No. 10 or larger wires from the battery to the fuse box, and run from that as many circuits as may be needed, each circuit with a fuse. Running lights should be on a separate circuit, all other outside lights on another, cabin lights on another, fans and other electrical machinery on another, and so forth. Do not put too many lights on a circuit, especially with low voltage, or you will overload your wiring. Separate circuits will aid you in locating trouble, and prevent a short in one place from putting out all the lights. Be sure to use big enough fuses. Remember that five twenty-five watt lamps will burn 20 amperes at six volts.

All outside connections must be entirely waterproof. As this type of connection is expensive, and likely to cause trouble, it is best to avoid them wherever possible. Do not forget to put one or two plug receptacles around the engine compartment for extensions to use in working around the engine.

Most small boats use automobile type lamps with what is known as bayonet or Ediswan bases. These are generally satisfactory inside the boat, if well made fixtures are used; but if used outside, every precaution must be taken to keep dampness away from them. The contact in this type of base depends on two little springs that are likely to become corroded on exposure to dampness, when there is sure to be trouble. It is not generally known that even six volt lamps may be obtained with standard or medium screw base, such as is used in houses and in electrical work generally. Standard electrical equipment is made in such large quantities that it is quite cheap, and unless its size is objected to it will generally be found very satisfactory. Never use larger than twenty-five watt lamps on board a small boat, as the larger sizes cause too great a drain on the battery. Indeed, as the space to be lighted is generally quite small, it is possible to get along with fairly low power lights.

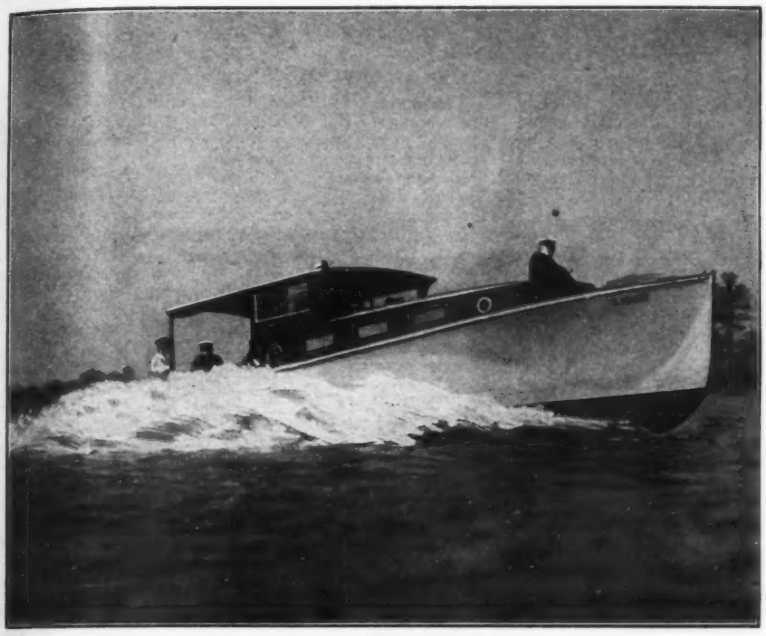
One of the most important advantages of electricity on a boat is that it is possible to have electric running lights, and yet it is surprising how many boats that are equipped with electricity still use kerosene lamps for this purpose. These are at best dim, but with the lens all smoked up as it generally is on a small boat, it is almost impossible to see them a short distance away. This is particularly true on sailing boats as they only carry green and red side lights that are harder to see than the white lights. There is a great deal said about combination oil and electric running lights, the idea being that in case of trouble with the electricity, oil can be used. Sometimes it is arranged to carry spare oil lights that can be put in place in case of trouble. Where a thirty-two volt lighting system is used, it might be a good idea to have two bulbs in each light, one connected to the lighting system, and the other to the starting battery. Then in case of trouble with one system, the other set of bulbs could be used.

It is better to use built in, or at least permanently attached running lights. Then light may be had by simply pushing a switch, and outside connections are avoided. Frequently the side lights are built into the deck house or bridge screen. In this position it is possible to tell whether they are burning or not without leaving the wheel. The bow light should be as near the bow as possible, preferably on the stem head where it will not throw light on the deck, and will be less objectionable in a fog. If placed there, it should, however, be very strongly built, as it is likely to come in for some rough usage when anchors are being handled.

In all electric running lights it is important to be able to quickly replace a burned out bulb, as this is the only trouble that is likely to be encountered. One of the illustrations shows built in side lights where the bulbs are reached from inside the boat by pulling out a drawer in the chart table on one side and lifting the lid of a locker on the other. The bow and stern lights should be arranged so that it is not necessary to pull the whole light to pieces to get at a bulb. On large vessels it is customary to use tell-tale lights to detect the failure of any running light, but on small boats it is a good idea to have a tell-tale light for the opposite reason, to make sure the running lights are put out when the anchorage is reached. Otherwise they are likely to be forgotten.

Searchlights are very convenient for night navigating, but to be of any use they must be fairly powerful, and should be used sparingly as they cause quite a drain on a small battery. If you have a boat boom—which is a great convenience and easy to rig up on even a small boat—you must have a light at the end. This should be as small as possible, and must, of course, be weatherproof.

(*Continued on page 82*)



From Biddeford Maine to . . . Jacksonville Florida

Fig. 549 Flag Pole Socket—Bow—Polished Brass

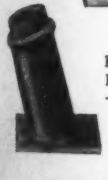


Fig. 550 Flag Pole Socket — Stern — Polished Brass

Fig. 5253 Sea-More Portlight

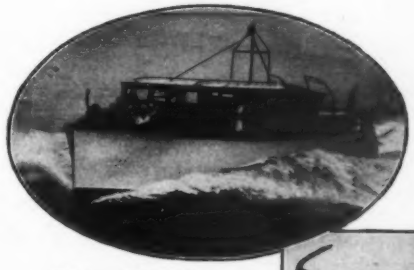
Fig. 855 Liquid Compass

Experienced boat builders use W-C Fittings . . . . .

Take a tip from boat builders who have proved that they know their business. Up in Biddeford, Maine, at the Staples-Johnson plant there's a crew of seasoned craftsmen who have been building boats ever since their fathers left off fashioning the old time clippers. These men know boats from practical experience, they appreciate the value of staunchness—and so they use W-C Fittings. Shown above is the new "Marblehead 34".

Down in Jacksonville, Florida, the Huckins family—builder of Fairform Flyers—has been closely connected with yachts and shipbuilding for ten generations—since 1639. Again experience advises the use of W-C Fittings.

And so the story goes:—experienced boat builders everywhere are specifying W-C Marine Hardware—not alone for the seaworthiness and quality which has been synonymous with the W-C name for 83 years—but also for the modern grace of line which harmonizes with the craft of today, the new improvements and features which Wilcox-Crittenden has developed.



Fairform Flyers built by Huckins Yacht Corporation use "Yachtsman's" anchors exclusively

The story of these new improvements is yours for the asking. Write for the 1930 Boating Manual and Catalog. It not only helps you keep your boat up-to-date but also is a mine of helpful information. Proper weights of anchors, hints on mooring, instructions on the care of boats, how to box the compass, rules of the road at sea and many other articles make this new book a reference guide for all boatmen. Wilcox, Crittenden & Co., Inc., 4 So. Main St., Middletown, Conn.

Wilcox-Crittenden *Dependable Marine Hardware*

JUSTSO, 21 FEET OF ABLE RUNABOUT

(*Continued from page 57*)

You know there is less knowledge among boat builders generally in connection with laying down the lines than you suppose. And it is no wonder. Lines as drawn for building are complicated things and it is no simple thing to draw them accurately and very, very far from simple to lay them down full size. Experience is the thing that counts here.

The construction of Justso follows the usual practice for craft of this type; that is, single planking with battens backing the seams. Since the boat is rather heavier in construction than generally applied single planking is used on the bottom, and this is ⅝ inch in thickness. Unless we borrow the three ply sewn system for planking as used by several European builders I do not see how we can improve upon planking with seam battens or double diagonal planking. The latter is excellent for all kinds of small boats but is a difficult proposition for the amateur builder.

The keel for Justso will be made from 1⅞ by 4 inch white oak. You might use in place of this yellow pine or fir if the oak is unobtainable. It must be in a single length and will be sprung to shape. Of course there is a rabbet cut the entire length into which to fit the edge of the garboard planks. The location, depth and angle of the rabbet can be gotten from the laying down plan; in fact this is the only accurate way it can be gotten. So you see here is another credit to be checked up in favor of the full size drawing.

The stem will be made from 2 inch natural crooked hackmatack; nothing is better for the purpose than this wood. For those who are inquisitive—hackmatack is the root of the larch tree. Larch trees grow only where there is a soft top layer of soil in depth of from four to six feet thickness. Underlying this there must be a hard strata, perhaps of clay or so other equally hard soil. Now as the roots of the larch tree grow down they reach the hard strata and turn off at more or less right angles to the trunk keeping in the soft top soil. Thus the knees are formed. Years ago it was possible to get very large knees, both in length of legs and thickness; but nowadays hackmatack knees over 6 inch in thickness are difficult to get hold of. At any rate this is the best wood known for making stems for small craft.

The stern will be made from mahogany. This will be laid over a frame of ⅞ by 2 inch white oak. The frame will be sawn to the crown shown, the radius of which is 61½ inches. It will be necessary to make, or have made, a bronze casting as indicated, the purpose of this being to serve as a knee between the end of the keel and the stern board and for the support of the rudder post. The mahogany will have to be steam bent, otherwise will not stay put. The seams between this planking will need battens; these to be fastened with brass screws. No. 8, 1 inch long will be about the right size to use. The battens will be made from oak and should be ⅝ inches thick and 2 inches wide.

In the second part of this article which will appear in MoToR BoatinG next month, I shall give a detailed drawing for the stern casting, the rudder and rudder tube.

In setting up the keel use three bronze bolts for making the stem fast. These should be let in with the heads countersunk into the outside of the keel and with the nuts and washers inside. If the joint between the stem and keel is made perfectly and painted well before fastening there will be no necessity for boring for stop waters. A stop water is a white pine dowel which is driven into a hole bored through the joining of any part of the boat's frame. The purpose of a stop water is to prevent water from running along a joint and thus finding its way into the bilge. Very useful little bits of pine these are, too.

The frames will be made from ⅞ by 2 inch white oak and will be set on 20½ inch centers. The bottom ends of the bottom frames will be fastened to floor timbers made from 1⅛ inch thick white oak. These fastenings should be screws, either galvanized or brass. Really galvanized screws are the strongest but because of the way in which the threads are filled with galvanizing they do not hold as well as brass screws. The best fastenings are bronze screws; however, these are not readily obtainable and are costly. Brass, as dished out by the average hardware store, will answer well enough.

Where the side frame joins the bottom frame a ⅝ inch white oak knee will be used. This does not have to be a natural crooked knee; but if straight grained stuff is used the grain must extend across the corner of the frame and not with the line of either frame. I should use brass screws for fastening the knee to the frame, using No. 12 screws 1½ inches long. There should be at least four screws each side of the keel. There will be eleven regular pairs of frames and three extra floor timbers under the engine beds; the latter will be the same dimenisons as the rest of the floor timbers, that is 1⅛ inch white oak cut to the heights shown on the plans.

This now reaches the stage where the boat is ready to set up. Next month I shall conclude this article accompanying the text with several sketches showing details of construction. In the meantime it might be a good idea to get complete blueprints drawn to a scale of 1 inch to the foot. These can be had from the Editor of MoToR BoatinG, at moderate cost. Write for particulars and circular of useful books for amateur builders, 959 Eighth Avenue, New York, N. Y.

(*To be concluded*)

DRAGONFLY, A FOURTEEN-FOOT RUNABOUT

(*Continued from page 59*)

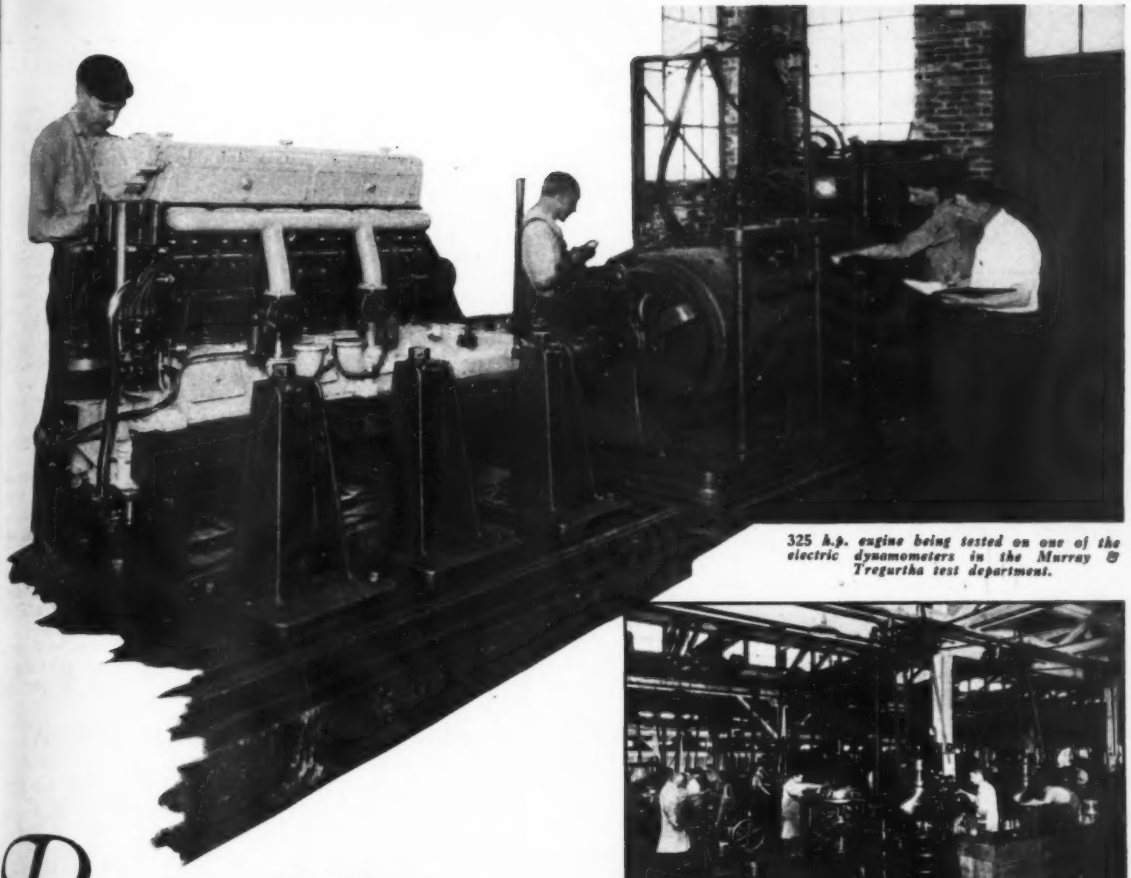
The engine beds will be made from oak sided 2 inches and moulded to suit whatever engine is installed. There will have to be three extra frames and floor timbers under the engine beds as shown in the construction plan and the sketch in Figure 6. The beds will be through bolted to the floor timbers with ¼ inch galvanized iron bolts. I learned years ago that so far as vibration is concerned that long engine beds are about the poorest thing that can be put into a boat, and have since stuck to the arrangement shown in the plans of this and all my other small boats. Of course in the case of a very lightly constructed hull the long beds are useful for the purpose of giving longitudinal strength to the hull; but that is a different matter.

The deck beams will be made from ⅝ by 1⅝ inch oak and will be set on centers as shown; that is one on each frame and two between, excepting in the way of the cockpit. The deck beams rest on a shelf made from ⅞ by 1¼ inch fir. The shelf will be through fastened to the frame heads as shown in Figure 2. Use long copper nails with burrs for fastening these. There will be a doubling piece of ⅝ inch spruce running from the stem head to the forward end of the engine hatch and a similar doubling aft. The deck will be made from ¼ inch thick fir plywood and is to be covered with light weight canvas or unbleached sheeting. The latter is plenty heavy and if well painted will give good service. Of course the plywood must be painted on its under side before laying and the sheeting must be stretched out over wet paint. Around the edge of the deck the sheeting will be turned down and tacked. Then covered with the half round moulding shown. Figure 5 shows how the sheeting or canvas will be laid and tacked down.

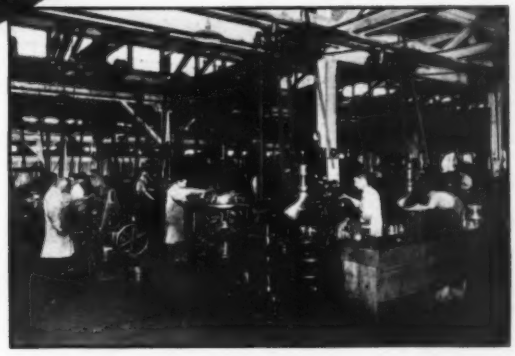
Use plywood for bulkheads and flooring as shown. This should be made from the best grade of this material it is possible to get. And be sure to paint and varnish well giving at least three coats all over. The coaming and the rest of the trim can be made from white cedar or mahogany; the former makes a fine appearance if varnished. Such items as the painting, the hardware, the steering gear, etc., were discussed last month and need not be repeated again.

There is a lot of satisfaction in having blue prints from which to work and since these can be had at moderate cost it would be well to get them. Write the Editor of MoToR BoatinG, 959 Eighth Avenue, New York, N. Y., for particulars and circular on useful books on boat building.

I have had a number of requests from readers asking for plans of a small sailing boat, one in which two boys could learn to sail in. And one that might make a class for racing. Therefore, I have started the plans of a 17 foot by 5 foot beam V bottom boat that will undoubtedly prove of interest to a great many readers. This will be a center board boat and while her name has nothing to do with her performance I shall call her Turnover. So look for her next month.



325 h.p. engine being tested on one of the electric dynamometers in the Murray & Tregurtha test department.



Milling and gear cutting department of the Murray & Tregurtha plant.

Reliability—

is assured in Murray & Tregurtha marine engines by correct design, the best materials, precision machining, repeated inspection of every part, and thorough testing of every engine under the personal supervision of our Chief Engineer Walter S. Smith.

Engines now available, 65, 110, 325 and 400 horse power, both heavy duty and high speed types, designed for boats of 35 to 125 feet in length.

Consult your naval architect or write today for further particulars.

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NORTH QUINCY, MASSACHUSETTS

15 MINUTES FROM THE BUSINESS CENTER OF BOSTON

View of Murray & Tregurtha plant from Neponset River.

YARD AND SHOP

(*Continued from page 66*)

THREE NEW RECORDS AT ALGONAC

May 28 was a gala day at Algonac for a new sales, production and shipping record had been established. The sun glistened against the sides of a mahogany runabout as it silently dipped into the waters of the St. Clair River. This was the two hundredth 17-foot Chris-Craft, destined to be shipped to Wilson & Richardson, Incorporated, Chicago, after the original production release on this model had been given. Here indeed was a new record.

Shown below are the officials of Chris Smith & Sons Boat Company, responsible for this remarkable sales, production and shipping record. Reading from right to left they are Jay W. Smith, president and general manager of the company, Chris Smith, chairman of the board of directors, A. W. MacKerer, naval architect and plant superintendent, John E. Clifford, general sales manager, Gordon P. Manning, advertising manager, J. R. Whiting, director of service, and R. Mac Krebs, service manager.

Of the 49 days required to build these 200 17-foot Chris-Craft fully one-third was necessary to adequately prepare building forms, jigs and necessary molds to properly fabricate the motor boats. All Chris-Craft are built in straight line production; and the machinery which keeps this production moving is as important as the actual building itself.

The instant accord which this newest of Chris-Craft has received points more than ever to the interest which the public as a whole is displaying in motor boats. J. E. Clifford, general sales manager, Chris Smith & Sons Boat Company, has stated that this year will see fully twice as many new motor boats on the water as last year. His statement is backed by sales figures.

A SMART COMMUTER

One of the most interesting of the commuters which tie up daily at the 26th Street landing of the New York Yacht Club, is Cossac, the fast yacht recently launched for George M. Moffatt, vice-president of the Corn Products Refining Company.

This sleek new speedster, which was built by the Consolidated Shipbuilding Corporation from plans by John H. Wells, Inc., measures 75 feet in length by 13 feet 4 inches.

In design she is somewhat similar to the two very well-known yachts, Frolic III and Cigarette, recently designed by the same naval architects for, respectively, Walter P. Chrysler and L. Gordon Hamersley.

Cossac's two 500-horsepower Winton gasoline engines bring her from Mr. Moffatt's country place at Glen Head, Long Island, to New York at an average running speed of thirty miles an hour.

A feature of the accommodations is the spacious after-stateroom, panelled in knotty pine. Adjoining it is a toilet room and shower room. Unusually large lockers and drawers under the berths provide clothes space.

Both the wide after-cockpit and the bridge deck have comfortable leather-upholstered seats.

The forward cabin is decorated in a modified modern style, with unusual fabric hangings and upholstery of a smart nautical flavor. Here breakfast, prepared in the adjacent galley, is served to Mr. Moffatt and his guests while making the run into town.

DE LUXE CRUISER

Wm. Deering Howe of 55 Wall Street, New York City, recently took delivery of a handsome 46-foot Matthews double cabin deluxe sport cruiser which he will use in and around the waters of New York City and the Sound.

It has twin Sterling motors which provide a top cruising speed of 25 to 26 miles per hour. It is a boat which offers the advantages of a fast commuter combined with complete cruising comforts.

The forward cabin has four berths with toilet adjacent to it. There is a large galley equipped with a three-burner stove, ice chest, cupboards and dish racks. In the after cabin is the owner's stateroom supplied with a double bed, a lounge and toilet with every accessory for extended cruising.

The bridge deck amidships is enclosed and has spacious dimensions, with the motors accessible beneath the bridge deck hatches. An extra large driving cockpit protected by a tilting windshield is another feature of smart design included in this, the smartest and most expensive boat of the Matthews' series of 38 and 46-foot models. A party of six or eight can readily be accommodated. There is also space for one or two paid hands aboard this deluxe design.

ABLE 45-FOOTER FOR CALIFORNIA YACHTSMAN

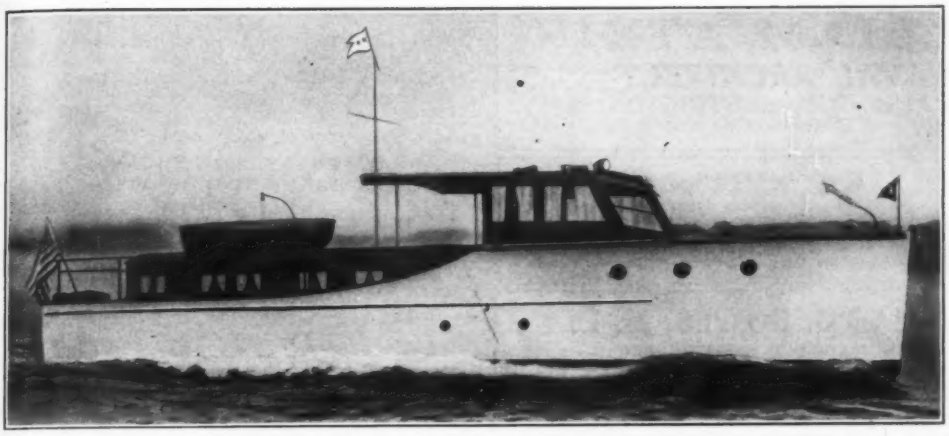
The raised deck cruiser Natomah was delivered by her builders, H. R. Fish & Company of East Oakland, early in June, to H. M. Dreves, who promptly hoisted the burgee of his club, the Aeolian Y. C. of Alameda.

Natomah's measurements are 45 feet x 10 feet 10 inches x 3 feet 6 inches. H. R. Fish, her designer, has incorporated a number of features in the interior arrangement that provide unusually ample quarters for eight persons, with plenty of room for the stowage of personal effects, fishing gear and supplies for a long cruise. This tidy ship is exceptionally well built throughout. Two 80 h.p. 6-cylinder Red Wings working through two 22x16 screws give her a speed of close to 20 m.p.h.

(*Continued on page 122*)

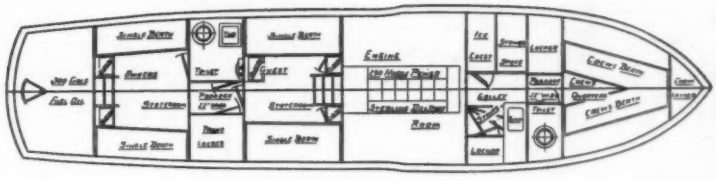
Members of the Chris-Craft organization responsible for setting a remarkable production record on the new 17-footer

Save $6,000 on this Boat



SPECIFICATIONS

Length, 45 ft. Beam, 10 ft. 6 in. Draft, 3 ft. White Oak frames. Cedar planking. Full headroom. Water Tanks, 100 gal. capacity. Fuel Tanks, 300 gal. capacity. Home Lighting System. Dingby.



Original Contract $18,500 Can be bought for $12,500

THIS magnificent Cruiser is now under construction. Just before completion, original owner decided upon a boat of larger proportions. If purchased immediately, will be finished in accordance with your individual ideas as to furnishings, finishing, etc.

Two double staterooms, extra berths for additional guests, complete bath and shower, lavatory. Berths for crew of two, with lavatory. Completely equipped galley. Hot and cold water pressure system. Interior enameled with mahogany trim. Powered with 6-cyl. 290 H.P. Sterling Petrel Motor. Single screw. Gasoline propelled.

Without a doubt this is the outstanding boat bargain of the year. Can be seen and thoroughly examined by appointment. If you want a boat that will fulfill your every desire, you should avail yourself of this extraordinary opportunity.

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OVER seventy-three years' experience outfitting mariners insures you not only the finest in custom made uniforms, but a guarantee of correctness in every detail of our garments.

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99 to 105 Myrtle Avenue, Brooklyn, N. Y.
(Near Bridge Street) Telephone: Cumberland 0804

FIFTEENTH HARMSWORTH RACE

(*Continued from page* 45)

since the precious emblem has reposed in a sacrosanct niche in the clubhouse of the Detroit Yacht Club.

The new international class, for which Major Segrave had promised two boats, is for craft of twenty feet or more in length, without any other hull restrictions, and powered with marine engines of not more than 135 rated horsepower. H. Lutcher Brown, well known sportsman of Houston, Texas, is one of a dozen prominent yachtsmen preparing for this event.

The regatta program follows:

Friday, August 29th.

Time	Event No.	Description
1:00-3:00	1	Kermath Trophy Cruiser Handicap, 1st heat, total race 4 heats or approximately 75 miles.
3:00-4:00	2	One-hour race for stock runabouts, Class B, not over 60 H.P., under A.P.B.A. Rules, see page 177, 1930 year book.
4:00-4:25	3	1st heat, 2½ litre (151 cu. in.) Class, limited, 5 miles.
4:30-5:00	4	Dinghy race, inboard or outboard, for yacht owners, distance to be announced.

Saturday, August 30th.

10:00-1:00	5	Kermath Trophy, 2nd heat.
1:00-1:45	6	Displacement Runabout Race, free-for-all, 25 miles, unlimited.
1:45-2:10	7	2nd heat, 2½ litre (151 cu. in) limited, 5 miles.
2:15-2:25	8	Glider take-off for record (glider to take off from Scott Middle Ground).
2:25-3:00	9	1st heat match race Rainbow VII and Miss Dee Wite, 25 miles.
3:00-3:30	10	Class B, Divisions I and II, ontboards, 5 miles.
3:30-4:00	11	Class B, Division III, outboards, 5 miles.
4:00-4:30	12	Yachtsmen's Association of American International Trophy, 1st heat, Class C, Division II, outboards, 7½ miles.
5:00-5:45	13	1st Race British International Harmsworth Trophy for unlimited class, 30 nautical miles.

Sunday, August 31st.

8:45-10:45	14	Kermath Trophy Cruiser Handicap, 3rd heat.
11:00-11:30	15	1st heat, the Detroit News International Trophy, 5½ litre (335 cu. in.) Class, 20-foot water line, length 15 miles, for boats powered with Scripps, Gray, Chrysler or Lycoming engines.
11:30-12:15	16	Corsair Cruiser Chance Invitation, 5 miles.
12:15-1:00	17	A. C. F. Cruiser Chance Invitation, 5 miles.
1:00-1:45	18	Liggett Cruiser Chance Invitation, 5 miles.
1:45-2:30	19	Matthews Cruiser Chance Invitation, 5 miles.
2:30-3:00	20	2nd heat match race, Rainbow VII and Miss Dee Wite, 25 miles.
3:00-3:30	21	3rd heat, 2½ litre (151 cu. in.) Class, limited, 5 miles.
3:30-4:00	22	The Detroit News International Trophy, 5½ litre, 20-foot class, 2nd heat, 15 miles.
4:00-4:30	23	Y.A.A. International Trophy, 2nd heat, outboards, Class C, Division II, 7½ miles.
4:30-5:00	24	Class D, Divisions I and II, outboards, 5 miles.
5:00-5:30	25	Class D, Division III, outboards, 5 miles.
5:30-6:00	26	Class G and Under, Divisions I and II, outboards, 5 miles.
6:00-6:30	27	Class G and under, Division III, outboards, 5 miles.
6:30-7:00	28	The Detroit News International Trophy, 5½ litre, 20-foot class, 3rd heat, 15 miles.

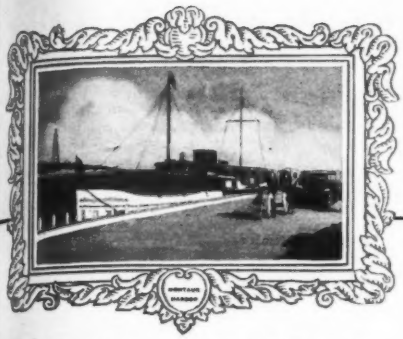
Monday, September 1st.

9:00-11:30	29	Kermath Trophy Cruiser Handicap, 4th heat.
12:00-2:00	30	Runabout Invitation Race, 50 miles.
2:15-2:45	31	3rd heat match race, Rainbow VII and Miss Dee Wite, 25 miles.
2:45-3:15	32	Class C, Divisions I and II, outboards, 5 miles.
3:15-3:45	33	Class C, Division III, outboards, 5 miles.
4:00-4:30	34	Y.A.A. International Trophy, 3rd heat, outboards, Class C, Division II, 7½ miles.
5:00-5:45	35	2nd race, British International Trophy, for unlimited class, 30 nautical miles.*

Tuesday, September 2nd.

*If third race is necessary for British International Trophy it will be run at 5:00 P.M. on Tuesday, September 2nd.

Advertising index will be found on 3rd last page



Lake Montauk's new inland yacht basin provides draft for even Diesel-driven yachts . . . deep, 200-foot broad channel . . . palatial yacht club.

Giant Swordfish *and* Tuna

. . . only 3 hours from New York!

DURING July, August and September the big-game fish of the ocean come in abundance into the limpid blue waters off ultra-smart Montauk Beach. There is no off-season! Tuna and swordfish . . . world's champion tackle-smashers . . . are taken on rod and reel!

On cool, starry summer nights talk at the palatial Montauk Manor . . . the Island Supper Club . . . the Montauk Yacht Club . . . vibrates with the day's battle of the century . . . of the record fish that got away.

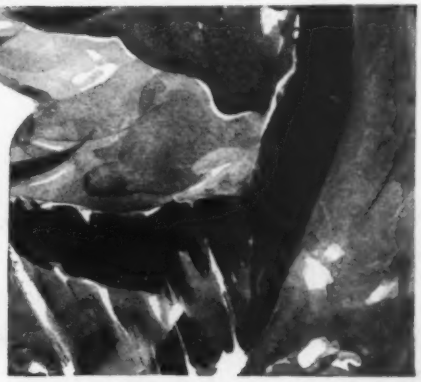
Fishing, like everything else at this fashionable summer colony on Long Island's slender tip—125 miles out in the Atlantic Ocean—is found in de luxe form. Boats—the most modern fishing cruisers. Guides—experts who have fished all seas.

Yet fishing is but a single diversion. On Montauk's heather-clad downs are two superb 18-hole golf courses—replicas in soil, turf, setting and plan of Britain's best. A land-locked yacht basin to shelter cruisers and yachts. Thirty miles of bridle paths . . . fox hunting . . . A wide, gaily-lit boardwalk 1,600 feet long—and surf bathing 125 miles nearer the Gulf Stream. This summer . . . come with your family to Montauk Beach. The most wonderful location on the Atlantic Coast for a summer home. 10 degrees cooler. Quickly accessible from New York by rail, motor and water.

Make reservations now at the Montauk Manor or write for full descriptive literature. Montauk Beach Development Corporation, Montauk, Long Island. New York Office, 450 East 52nd Street . . . . Telephone Plaza 0783.

Montauk beach

ON LONG ISLAND'S SLENDER TIP



. . where fish and game are teeming . . EASTMAN *Flying Yacht*

FROM home waters the Eastman Flying Yacht whisks you beyond the horizon in almost less time than it takes to tell about it. Fishing or hunting trips can be taken over a week-end—for the Eastman with its speed of 112 m. p. h. offers sportsmen the possibilities of seven-league boots!

There is plenty of room for a party of four and their duffel in the Eastman's two spacious cockpits. With full load any spot within a radius of 300 miles is within range—400 miles, if only three are aboard.

Even the smallest lake offers a "landing field" for the Eastman. And it can get off again without difficulty as it leaves the water in 8 or 12 seconds—climbs 800 to 1000 feet per minute.

Speedboat and sport-plane combined the Eastman is equally at home on the water or in the air. Its all-metal hull permits it to be beached like a boat.

The Eastman is easy to learn to fly—write today for our catalog and arrange for a demonstration.

* * *

The Eastman offers motorboat dealers an opportunity for immediate profits—send for our sales franchise details.

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PARKS AIRCRAFT CORPORATION
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FORT AND CAMPAU STREETS, DETROIT
Chanin Bldg., New York; Roosevelt Bldg., Los Angeles

A DOUBLE CABIN FORTY-SIX

(*Continued on page* 54)

achievement by a very definite ambition—to burnish to brig luster a prestige of sixty-five years' jealous nurturing.

The exceptional staunchness and seaworthiness for which B ger Boats have always been noted are characteristic of the n Burger 46. It is not only a one-man boat, but it can actually safely be handled by one man.

A feature that the experienced boatman will appreciate, and that is particularly important to the novice in rough weather, the deck space all around the cabin. It makes landing much ier and safer without reducing the size of the cabins.

The Burger 46 is powered with the reliable Sterling engine standard quipment. Other engines are optional with the purch ers.

The arrangement of passengers' and crew's quarters reflects degree of privacy and roomy, luxurious comfort rarely achie in modern one-man cruiser design. Forward and aft cabins, the crew's compartment, are apart by themselves, accessible wi out intruding on any other.

Sleeping accommodations are ample and complete. A per nent double berth and spring-upholstered transom seat and la convertible into extra upper and lower berths, provide comfo able sleep for four in the forward cabin. The aft cabin sle four more. Here we have two convertible spring-upholste transom seats and backs—one on each side, making two pairs uppers and lowers. Five full-length lockers and two dresse with large drawers under seats, keep clothes in good condition.

Both forward and aft cabins have adjoining private toilets a lavatories complete with medicine lockers and dressers. There also a toilet and lavatory for the exclusive use of the crew.

The detached galley is equipped with gas plate, sink, dish rac 250-pound ice-box, dressers, drawers and an abundance of wa ing space.

The large aft cockpit is well protected from wind and spray.

Unusual interest centers in the deck-house. Here the skip directs his craft, and it is a delightfully easy and pleasant with all controls conveniently grouped around the wheel. Th is plenty of room for all on board to gather together and la away the hours in luxurious comfort.

The specifications are interesting, as they emphasize the in tidious care used in the selection and adaptation of materials their specific uses. The heavy, sound white oak keel and ribb are impressive. The stern and hull planking of solid mahog thicker than most builders deem essential; the mahogany cabi work in deck-house and cabins; the copper, brass and bro hardware, fittings and water-connections; all are indicative keen understanding of what constitutes a good boat.

LAUNCHING AT MANITOWOC

The new twin-screw diesel yacht Northwind, designed by G & Stevens, Inc., and constructed at the yards of Manitowoc Sh building Corporation, was recently launched, at Manitowoc, Wi consin. The hull is distinctly modern in design, with stra stem, elliptical stern, good freeboard and a lively sheer. well proportioned stack, military mast, continuous steel d house and practical bridge combine to form a most pleasing p sel from every viewpoint. While her owner, C. M. Clark, wa a yacht of conventional design and good sea-going qualities, tain accommodations were desired within a limited size h

How well this idea has been carried through is shown by accommodations offered. With the overall length of 123 fee inches, beam of 22 feet and draft of 7 feet, it has been pos by careful planning to have, in the owner's quarters aft, large double and three single staterooms with three baths. the use of a sliding partition between two of the single roo these may be easily and quickly converted into another do stateroom, should such be needed. There is also a convenie located maid's room.

The main deckhouse, which is continuous, contains a large ing-saloon forward, with connecting butler's pantry. Imm ately aft of this is the captain's stateroom, with companion la on the port side leading up to the pilot-house and bridge. is followed by the smoking room, with a very large and hand living room and lounge in the after end. There is also a p shelter-bay for protection in bad weather, located in the end of the main deckhouse. The smoking room and living are connected with the dining saloon by an inside passag use in inclement weather.

Powered with a pair of 300 h.p. Winton diesel engine Northwind is designed for a cruising speed of 13 knots, maximum of 13.5 knots. With a fuel capacity of 22 to will have a cruising radius of at least 2200 miles.

Advertising index will be found on 3rd last page

A FRANK TALK ABOUT THAT BOAT OF YOURS.

YOUR boat is a beautiful craft and you have a right to be proud of her. She is a real beauty and gives you many happy hours.

But here's something that merits your most serious thought. Is your boat *safeguarded* in every way?

Every season there is a number of bad fires on boats—far too many. You don't like to think about them—but you should. Records show that practically all these fires were due to a backfire explosion from the motor. You can't prevent an occasional backfire explosion, but you *can* avoid the danger from such an explosion.

A simple but marvelously effective device, called the Oberdorfer Backfire Trap*, does the trick. It comes in three sizes, so that it is available for any kind of carburetor. It is easily attached to the airhorn of the carburetor. The proper functioning of your motor is in no way interfered with. In case of a backfire explosion this ingenious device traps and kills the flame so that *nothing* can be ignited—not even dense gasoline fumes.

The Oberdorfer Backfire Trap has been perfected especially for marine use and is built of non-corrosive metals.

Think it over. For a very low price you gain freedom from the greatest threat to life and property that you will ever find on the water.

There's another hazard to your boat from which you should be protected. That is the danger of unexpected leaks and dangerous accumulations of bilge water. You never know when you are going to stove in a plank on a runaway buoy or get run into by another boat. You never know when the stuffing box might start leaking. You never know when a storm might go rarin' and tearin' around—with the threat of a swamped boat.

Our advice to you is to hire a watchman to guard your boat day and night. And we know one whom you can get very cheaply. He'll never ask for shore leave either, and he's yours for keeps, body and soul. His name is Master Oberdorfer Automatic Bilge Pump* and he is a wonder. Install this faithful fellow on your boat and your worries are over as far as bilge water is concerned. He operates on your storage battery and eats up very little current. When the water rises in your bilge, this robot snaps into action and works until the water is pumped out. "The Master" is available in 6, 12 and 32 volt units.

We think you will realize the protection this safety device will give you. And if you are a lazy soul you will appreciate the work and bother it will save you.

Now, just another word. If the old motor doesn't seem to be percolating just right, maybe the circulating pump has seen better days. Replace it with an Oberdorfer Bronze Gear Pump and avoid the damages of an overheated motor.

Your marine supply dealer can supply you with an Oberdorfer Backfire Trap, an Oberdorfer Automatic Electric Bilge Pump, an Oberdorfer Bronze Gear Circulating Pump, an Oberdorfer Hand Bilge Pump, or an Oberdorfer Motor Driven Gear or Centrifugal Pump. Or if you want to, write to the M. L. Oberdorfer Brass Company, 2200 Thompson Road, Syracuse, N. Y., and they will send you all the dope.

*Patents applied for.

Oberdorfer Pumps

How 2 3/4 Inches can decide your summer's success

SPARK PLUGS are never considered a big item—even on a small boat. In size they're perhaps not over 2¾" long. And yet... take it from Mr. Walter C. McDougall of Lake St. Catherine, Vt.... spark plugs can make or mar the summer of many a motor boatman. He writes:

"During the various regattas held last summer by the Adirondack Circuit you could hear the complaints and kicks coming thick and fast from the drivers and fully 75% of these ructions were caused by spark plug trouble. The writer had his troubles during the early part of the summer but when he changed to the Robert Bosch Spark Plug my troubles ceased. Can truthfully say that no other make of spark plug stood up the way yours did and it is needless to add that this year the Robert Bosch Spark Plugs will be standard equipment on my motor."

Install a complete set of Robert Bosch Pyro-Action Spark Plugs in *your* engine. See what a difference it makes . . . in POWER, in speed, in dependability. See what a difference it makes when a spark plug is made to the Robert Bosch standards of workmanship, materials and design.

Have you the Robert Bosch Catalog for motor boats? Sent free on request.

ROBERT BOSCH MAGNETO CO., INC.
3603C Queens Blvd., L. I. City, New York

Robert Bosch
Pyro-Action
SPARK PLUGS

All Robert Bosch Pyro-Action Spark Plugs bear the full name "ROBERT BOSCH" and this trademark of Robert Bosch A.-G.

LIGHTING THE SMALL CRUISER

(*Continued from page 72*)

Riding lights are usually put on the masthead. These lights do not have to have fresnel lenses, but they should be carefully protected from the weather, as they are in a very exposed position and hard to reach in case of trouble. An automatic switch for the riding light is a great convenience, and it is so easy to make that it is hard to see why there are not more in use. Simply get one of the clocks used for turning electric signs on and off, and install it in the circuit with the riding light. Then it can be set to turn the light on at sunset, and off at sunrise, and the riding light will go on every evening, no matter whether there is anyone aboard or not. Even if yacht club service is available at your mooring, you will find such a system more satisfactory than the haphazard service attendants sometimes give, and if there is someone aboard all the time it is still a great help, as a lot of electricity is burned between sunrise and eleven o'clock, or whenever you get up in the morning. The thermostat clock shown in one of the illustrations was made for turning on a furnace in the morning, but by substituting a brass strip for the thermostatic metal it was made to turn the riding light on and off.

Much attention is paid these days to adequate ventilation, particularly of engine rooms and bilges, and with plenty of electricity available this is easily accomplished. There should be at least two openings into the engine room from the outer air, one for intake, and the other for exhaust. The exhaust outlet should lead above the awning, or to some other place where the smells from the engine room will not annoy the passengers. The fan should be on the exhaust outlet, preferably just under the deck, and there should be a duct leading into the bilge at a point as far away from the intake as possible. The fan should always be used to exhaust the air, as this will slightly lower the pressure in the engine room, and fresh air will rush in from every available opening. The fan should be run before starting the motor to make sure there is no gasoline vapor in the engine room, and when working on the engine, but it is usually not necessary to run the fan when the engine is running, as a constant supply of fresh air is drawn in by the carbureter. Galley fans may also be had, either ventilating through a port, or through a cowl on the deck above. The latter arrangement is better, as it is permanent, and does not cut off your light. Such a fan takes the heat away from the stove and prevents the cooking smells going all over the boat. Ordinary electric fans can also be obtained in six, twelve, or thirty-two volts, and are a great help in keeping the cabin cool on hot days.

An electric bilge pump is another convenience. This can be arranged not only to pump out the bilge, but also to supply water for washing the deck, or washing off the anchor when it comes up from a muddy bottom. It can be furnished with a section to pump out the dinghy after a rainy night. There are also automatic pumps which will operate whenever the water in the bilge reaches a certain level.

With thirty-two volt plant, electric attachments of all kinds may be obtained, and it is possible to have electric toasters, coffee percolators, waffle irons, and even vacuum cleaners. Life on board ship need not lack those little conveniences we are getting to consider necessities to life on shore.

THE VALUE OF BOATING

Boating is primarily a pleasure. It is also a school of training for boys and young men. As in driving a car emergencies arise that need a clear head and quick hand, so too in boating, quick decisions, that are right decisions, must be made without warning or preparation. On a boat one is free and independent of help. At times lives depend upon clear thinking and quick action. Versatility and adaptability are perhaps nowhere more exercised than in boating. A true boating enthusiast is a jack-of-all-trades. He must be carpenter, painter, plumber, electrician, ship-wright, laborer, and last but not least, cook. In a boat a man is on his own. His success and failure depend upon his own efforts.

A boy's training at school is based primarily upon theory. His valuable games are those that coordinate brain, muscle and eye. His training on a boat is practical and actual. Immediately he gets the reaction of his decision and judgment. He knows at once whether his thinking is right or wrong. So the average intelligent boy with a boat of his own learns fast, and becomes acquainted with his own strength and weakness. To know where in we are wrong is the first step to improvement. So give a boy a boat and he will learn to be master of his craft and himself.

To help that boy and others to start right, L. W. Ferdinand & Co., 152 Kneeland Street, Boston, Mass., have issued a little booklet, Weak Spots which tells in detail, with illustrations, how to keep a boat water-tight. This little booklet, the result of years of experience in conditioning boats, is free to you for the asking.

Advertising index will be found on 3rd last page

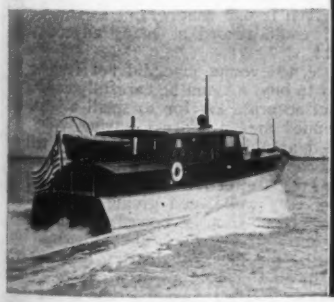
Matthews Cruisers are STAUNCH ENOUGH to Laugh at Any Weather

A stout Matthews Cruiser—Yours to command! To go where you will in any weather. Surely an engaging prospect for those men and women whose blood stirs and quickens to the lift of the sea, to the buoyancy and swift speeds of a fine boat. A stout deck beneath your feet, things shipshape below, a responsive helm and a quiet, smooth-running power plant. Is it any wonder the lure of the sea never deserts you—once initiated to Matthews ownership? You ask for sport? Something to challenge a keen eye and a steady hand? You'll find the year in year out ownership of a Matthews providing every comfort, every social need, the utmost in dependability, and a real brand of performance. The original cost for such rare entertainment and healthy relaxation is astonishingly low. The yearly expense attached to the ownership of a Matthews "38" or "46" is frequently less than a good automobile. Write for the new Matthews descriptive booklets. Plan on a Matthews today. You'll make no mistake—that we promise you! If convenient, consult your nearest Matthews dealer, listed below.

THE MATTHEWS COMPANY

Designers and Builders of Boats of Distinction . . . Since 1890

304 BAY SIDE, PORT CLINTON, OHIO

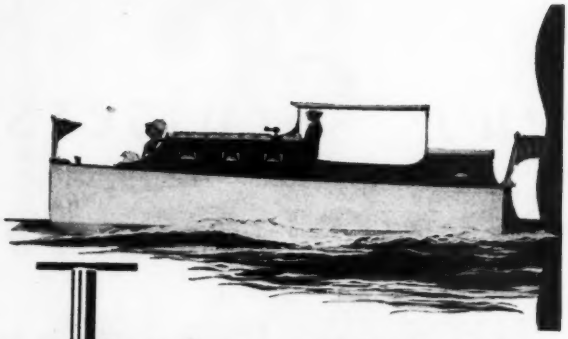


The 46-foot De Luxe Sport Cruiser is single or twin screw powered for speeds from 19 to 30 m.p.h.—fairly bristles with dignity, smartness, cruising luxury.

The enclosed bridge design in both the Matthews "38" and "46" double cabin cruisers presents an atmosphere of home comfort and restfulness. Complete protection accompanied by full visibility is insured.

The double cabin Matthews design offers cruising accommodations for six or eight and a crew, with many optional choices in interior arrangements.

SALES AND SERVICE—The Barret Co., 112 Second St., Louisville; Belle Isle Boat & Engine Co., 8777 E. Jefferson Ave., Detroit; Boardman & Flower, 1740 Van Ness Ave., San Francisco; Bruns, Kimball & Co., Cor. 5th Ave. and 15th St., New York City; Wm. V. Masson, 1619 Baltimore Trust Bldg., Baltimore; Mississippi Valley Yacht Sales, Times Bldg., Alton, Ill.; Walter H. Moreton Corporation, 1043 Commonwealth Avenue, Boston; Sampson Electric Co., 3201 South Michigan Avenue, Chicago; J. A. Scarlett, 436 East 2nd Street, Cincinnati; R. Sealy, Commerce Building, Galveston; Robert V. Staats, 675 South Park View, Los Angeles.



The first comfortable cruiser at anywhere near this price. . . . .

Only $2475 delivered in the water.

Meet the Scallop... a trim 28 foot cruiser... designed and built by a real cruising man for the yachtsman of limited means! A smart little yacht with living and sleeping accommodations for five... lowest in original cost... costs almost nothing to keep up and run! Powered with the Ford model "A", Barker Marine conversion motor, delivering a cruising speed of eleven m. p. h. A few are ready now... in time for a season of fun... with many more such seasons to come! Write or telephone for a trial run and complete information.

MILLARD, BREWSTER & CHAMBERS
INCORPORATED
230 Park Avenue • New York, N. Y.
NAVAL ARCHITECTS \\ Telephone VANderbilt 10167 // YACHT BROKERS
Cable Address: MILBRECH

Representatives in New York of
NOYES MARINE CO., 305 Congress Street, Boston, Mass.

SCALLOP
NEW 28 FOOT CRUISER

LOOK AT MY HANDS

(*Continued from page 24*)

supplies you with an enormous putty knife whose handle is thoroughly covered with green paint, and you're probably helping when the fleet lady comes along and your day is completely ruined.

Honest now, isn't that the way it looks sometimes? And that's not all either. Perhaps when you're at home that night, busily rubbing creams and lotions on your hands, to try and get them fairly clean and to take out some of the ache, you mention maybe you'll go down town to-morrow.

Immediately the Skipper suggests you purchase a few little things for the boat. In vain you tell him the stores where you shop are nowhere near the Battery, but he doesn't bother about a little detail like that. He only wants a few things; some rope, five or six different kinds of paint, a new set of sailing lights and while you're about it you might ask about a compass. (He has attended a class in navigation, during the winter and feels he must have all the equipment on the boat, whether he uses it or not.) And he offers, he'll make a list of some charts he wants—Port Washington and some other places.

In an effort to prevent collapse, you gather yourself together and point out that you've been sailing into Port Washington for years without a detailed chart, always getting along famously, except the time you, yourself, put the boat on the sandbar. But it's useless. The Skipper is going to be a real navigator or bust.

But there's really no pleasanter place to shop than in those stores down along the waterfront which cater to boatmen. Nowhere are they so patient with women who wander in with inadequate slips of paper, and try to explain what the Skipper wants to do with the half inch something or other like the sample, which on examination turns out not to be half inch at all, but seven eighths and they don't make them like that anymore. By this time you're hopelessly muddled, but in the politest way the salesman will extract the information about the size of boat and the kind of motor, and what you think the Skipper wants to do with it; and most of the time they fix you up. Best of all they don't act supercilious and make you feel even more ignorant than you know you are.

Incidently, the story the Skipper loves to tell, and cause me to retire blushingly to the cabin, concerns the time, early in our boating days, when I decided we must keep an accurate record of our trips. Going down to my favorite boat store, I explained to my favorite salesman, that what our otherwise perfectly appointed (so we thought) boat needed was a log.

"We don't have much call for that sort of thing," he said, "we haven't handled them in a long time. They're not so easy to get for a boat as small as yours and they're somewhat expensive, but if you go to this address, perhaps they can help you out."

Somewhat puzzled as to just what the size of the boat had to do with the log, I went to the address indicated. The windows were brilliant with brasses. There were (although I did not know it at the time) gyro compasses, with their metal mikes, huge wet compasses, sextants, and other aids to deep sea navigation. With a strange feeling that I was still in the wrong place, I stated my wants to the courteous salesman who approached me. The first and only question he asked me was,

"How big is your boat?"

"Twenty-eight feet," I replied, wondering what in the deuce that had to do with it. Even if our boat wasn't as big, we had just as much fun, and I could record as many adventures as if we had a steam yacht!

But the polite and concerned young man did not feel he had the sort of thing I wanted to buy. Again he carefully expounded the difficulty of making an accurate log for so small a boat, and writing on a card, he handed me an address, saying,

"We have never handled anything like that, but they tell me this chap has a very satisfactory patent log which is quite unusual. Of course they're not as effective as the larger ones, but they'd serve your purpose very well," and giving minute directions how to reach the riverfront shop he bowed me out.

Wandering down that dingy street, which always seems about to be pushed into the bay by the financial district, I saw sailors on leave, stopped to look in windows of stores where they equip ocean liners for long voyages, and after passing one of the most unusual philanthropic institutions in the world, I found the small shop of my destination.

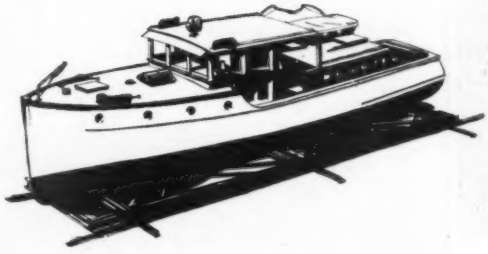
Again I stated my request, this time somewhat doubtfully, but the old salt behind the counter beamed. Of course he had just what I wanted; retiring to the rear of the store, he came back carrying what looked to me like a young propeller and a speedometer attached by yards and yards of cord, and laying this contraption on the table he asked triumphantly,

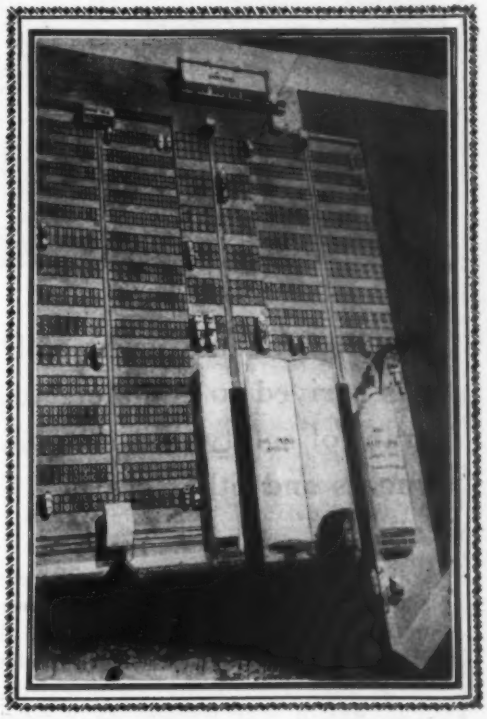
"Isn't that the finest log you ever saw?"

(*Continued on page 86*)

Advertising index will be found on 3rd last page

We'll put 'em overboard....
....on 24 hours Notice





RIGHT in the heart of New York City, convenient for New Jersey, New York, Long Island and Connecticut yachtsmen, there is a Model Boat Storage Yard of over 12 acres. It accommodates 150 cruisers, 30 to 50 feet and a number of runabouts; whose owners do care how their boats are handled.

EVERY BOAT HAS ITS OWN CARRIAGE
Electric winches do the hauling

There is no racking of vessels when hauling them out nor are they allowed to stand on a strain all winter. Each carriage has wheels that roll on steel rails. It goes under the boat as a hauling cradle and stays under her until you request her put overboard again.

We make our own
Copper Tanks
Canvas Work
Leather Work
Cabinet Work
Upholstery
Engine Repairs

It takes us only two hours to put any boat in the yard overboard. A dozen owners may want their boats the same day, so we say, "We'll put 'em overboard on 24 hours notice."

Phone or write for full particulars.

• • •

NEW YORK BOAT SERVICE CORPORATION

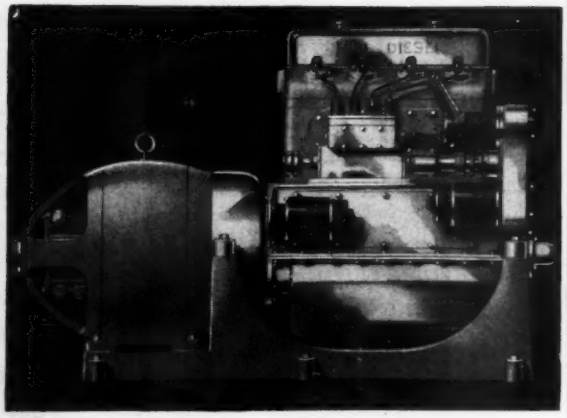
Subsidiary of

DAWN BOAT CORPORATION

CLASON POINT, NEW YORK CITY **Telephone: WESTchester 7000**

Reservations for 1930-31 are now being made

DIESEL-ELECTRIC



✱ The little aristocrat of Diesels has arrived to complete the program of safety and economy for yachts and other craft.

. . . Uses main engine fuels with remarkably smooth, quiet operation, and without smoke or odor . . The design conforms to the most advanced automotive practices, employing the finest materials of the metallurgists' art . . The weight and dimensions compare with gasoline sets of equal capacities . . Is regularly equipped with electric starter and generator, but can be started by hand cranking . . Furnished in ten, fifteen and twenty kilowatt sizes . . . Technical data will be sent upon request.

HILL-DIESEL ENGINE CO.

248 MILL STREET

LANSING, MICH., U. S. A.

Internal Combustion Engines since 1899

Diesels Exclusively since 1926

LOOK AT MY HANDS

(*Continued from page* 84)

Well, I broke down and confessed, it wasn't at all the sort of log I was looking for, and when we both finished laughing, the Captain explained the difference between a log and a log book, and thus our boat became the owner of a device which I have since learned records distance through the water.

You'll love the trip to the Geodetic Survey Office. If you get into the Hydrographic Office by mistake it won't make any difference. In fact you'll probably come away with some information as to the coast line of Cuba, and a clear understanding as to why you can't get a harbor chart of Oyster Bay there.

When you find the Geodetic office, they'll help you select the right charts for your cruises, and if your eye is attracted by the gay cerise colored cover of the Light List, they'll show you how to use one and you take it, because (you hope) that it will make you one up on the Skipper. In fact if you're not careful, you'll buy everything in sight, for the insidious thing about these government people is that they seem so reluctant to sell things that you instinctively feel you're getting a bargain.

Well, after this sort of shopping, you probably end the day by rushing up town to buy some material for the bunks in the back cabin, a set of special pots for the stove, and a deck chair. Just as you get home and sink down to rest the telephone rings and the Skipper announces that he's getting off early to go to the boat and don't you want to get up a picnic supper and come down?

That's the dark, dark moment when you wish all small boats were in Davy Jones' locker. But of course you go! And you have to admit that the last coat of white makes her look pretty slick, and the sun setting back of the hills across the river is alone worth all the trouble you took getting down.

Maybe the next day the boat goes over, and when the suspense is ended as to whether or not the plug is in and she floats, why you think she never looked nicer.

Then miraculously, all the pieces of the engine fit together and it goes. Perhaps that weekend you have your first sail. Everybody tells you how nice she looks and you point out what you've done and display your hands in proof. Later in the evening you suggest to the Skipper, wouldn't it be fun to stay all night. He's tickled to death, but nobly points out that there aren't many blankets and that you're going to a bridge the next day.

But you tell him that if he gets the robe from the car and you use your coats, everything will be fine. Anyway, you don't think you'll go to the party, because your nose is peeling and your hands are a sight, besides, if everything on the boat gets fixed up nice, the tide is right next weekend to get up on the Sound.

I often think that Mrs. Noah must have gotten awfully tired of the Ark as it floated about all that time, and she with all the animals to feed and the cabins to keep straight (imagine being on your own cruiser forty RAINY days). I'll bet she often complained that the work was ruining her hands, and that if she were ashore again, she'd drown before she'd set foot on that old boat. Yet, perhaps, when they were safely settled on Mount Ararat, and some evening when the wind blew hot from over the desert, she must have sighed and said, (Oh, my sisters, even as you and I):

"Noah, wouldn't this be a nice night to take a sail?"

Judy Anne Mahoney.

DURONZE, A NEW METAL

A new metal, which has been called Duronze, has been developed to fill a definite need for a metal for certain uses by the Bridgeport Brass Company of Bridgeport, Connecticut. Brass and bronze, while excellent for the various uses to which they are put, are lacking in certain properties which heretofore have been possessed only by other metals which were not corrosion-proof. The properties of Duronze are very interesting. Starting with a strength of approximately 42,000 pounds per square inch when annealed, it develops a strength of 130,000 pounds cold drawn. This drawing, however, does not make it brittle as is the case with many other metals. Duronze is a silicon bronze alloy having a tensile strength of approximately 100,000 pounds per square inch. It can be roll-threaded, upset, hot-worked or hot-forged. It is extremely resistant to corrosion as well as the effects of many acids, besides possessing an immunity to season cracking. Duronze is available in the form of sheet, strip, rod and wire and is particularly well suited to requirements that demand a metal possessing great strength, malleability and toughness, and resistence to chemical and atmospheric corrosion. As such it should find a very definite place in the marine industry.

Advertising index will be found on 3rd last page

SWIFT-WINGED

TO TRANSLATE MILES INTO MINUTES

Water Travel Into Joyous Cruising

The 39-foot Seagull Sedan Cruiser accommodating a party of eighteen. Four models ranging from 39 to 45 feet in single and double cabin arrangements are built to meet individual needs of speed and comfort.

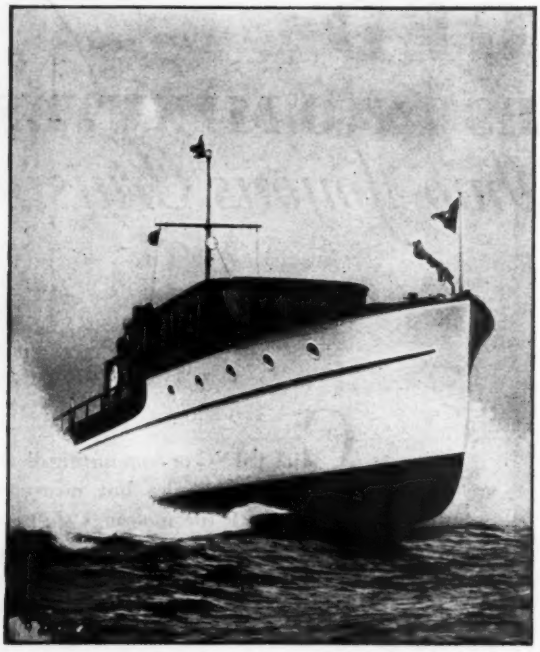
CRUISING or commuting distances are no longer reckoned in miles but measured in minutes and hours. With the moorings slipped and the anchorage left behind, your daily commuting from home to office and return becomes a restful interlude to a busy day And when the larder supplies are safely stowed—the ice chest filled—the apparel for a holiday cruise aboardship—you have but to consult your strap watch or ship's clock to forecast your sundown destination, be it one, two or three hundred miles distant At the wheel yourself, or relaxing in the cabin or cockpit, an engaging feeling of freedom, friendliness and security steals over you. The quiet hum of powerful engines, the easy grace and fine riding action of a staunch Robinson hull lures your thoughts from business cares to the carefree perspective of youth The rush of wind, the summer sun overhead, seasoned by cool, salt air, puts new sparkle into your eyes, whets a jaded appetite, makes your own world fairly sing with joy. Is it worth it? Is it! A staunch, fleet Seagull offers too much in relaxation, health and pleasure to be denied. We'll be happy to send you the illustrated catalog on Robinson Seagull Cruisers and Commuters, including full details and delivery dates.

ROBINSON *Seagull* **CRUISERS**

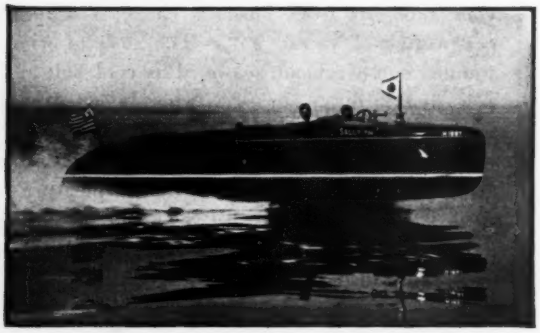
ROBINSON MARINE CONSTRUCTION CO. - - BENTON HARBOR, MICHIGAN

Goodrich Bearings

Friction reduced as speed increases



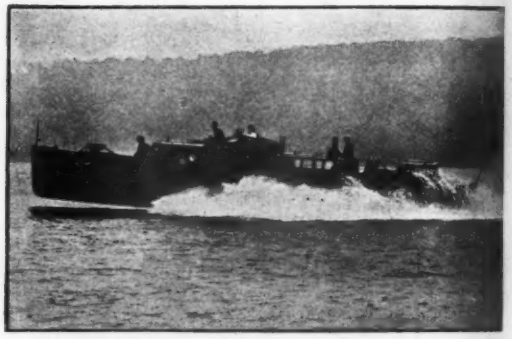
Thirty-six ft. cruiser YANKEE, *recently completed by George Lawley & Sons Corporation of Neponset, Mass., for S. M. Fairchild, makes 33½ M.P.H. with two Liberty motors driving 1¾" Monel metal shafts in Goodrich Bearings.*



SALLY TOO, *built in 1928 by the Luders Marine Construction Company for Austin Feuchtwanger. Speed 60 M.P.H. with 500 h.p. Wright Typhoon motor driving a 1½" Monel metal shaft in Goodrich Bearings.*

"TO ME, a boat without a Cutless Bearing is like an automobile with solid tires," writes R. B. Timberlake, Esq., of Montreal, Canada, owner of the *Baby Bootlegger* illustrated on the opposite page.

"A very decided improvement was noticed," he continues, "immediately the bronze bearing was replaced with a Cutless. Not only did it increase the engine R.P.M., but made shaft very smooth in operation.



I might say that the boat is much faster now than when run in the Gold Cup."

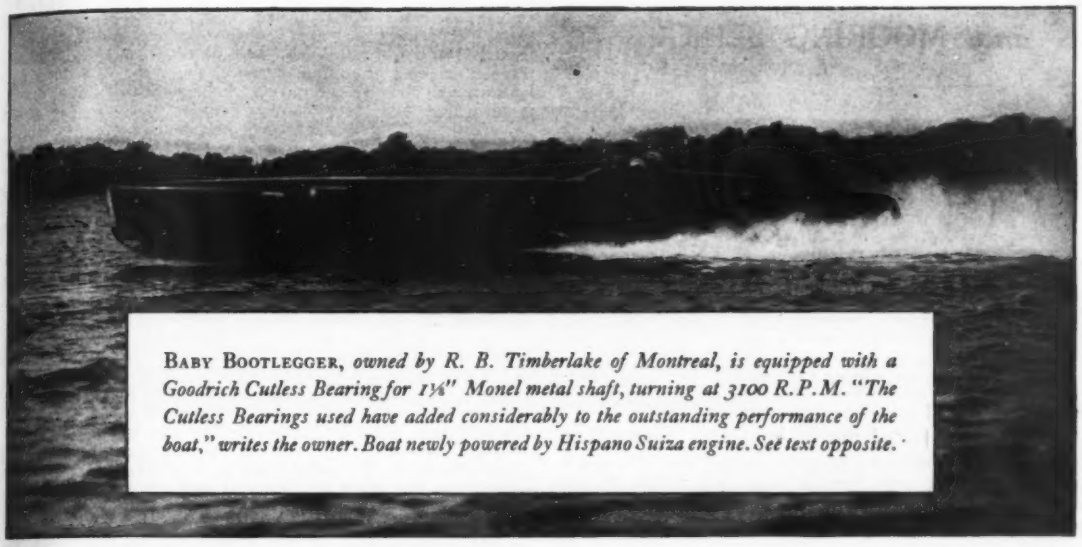
In actual service on the *Baby Bootlegger*, Goodrich Cutless Bearings have proved what laboratory tests have already shown: that as shaft speed increases, the friction of the Goodrich Bearings decreases; for at high shaft speeds the lubricating water film is more easily formed.

It is impossible for the shaft to seize in a Goodrich Bearing. Goodrich Bearings have been successfully used with shaft speeds as high as 6900 R.P.M. on 1⅜" Monel metal shafts.

B. F. GOODRICH RUBBER COMPANY
AKRON, OHIO

Advertising index will be found on 3rd last page

increase Shaft Speed



Baby Bootlegger, *owned by R. B. Timberlake of Montreal, is equipped with a Goodrich Cutless Bearing for 1¼" Monel metal shaft, turning at 3100 R.P.M. "The Cutless Bearings used have added considerably to the outstanding performance of the boat," writes the owner. Boat newly powered by Hispano Suiza engine. See text opposite.*

Whim III, *high speed commuter, designed by Albert W. Crouch of Tams, Incorporated, and built by the Consolidated Shipbuilding Company for Harrison Williams, made 53 M.P.H. in first trials with two Wright Typhoon motors turning Monel metal shafts at 2000 R.P.M. in Goodrich Bearings.*

Distributors of Goodrich Cutless Bearings

BALTIMORE, MD., The James Walker Co., 123 Light St.

BOSTON, MASS., Walter H. Moreton Corp., 1043-45 Commonwealth Avenue.

CHICAGO, ILL., Kainer & Co., 761 Mather St.

DETROIT, MICH., H. H. Smith & Co., 334 E. Jefferson Ave.

FREEPORT, L. I., N. Y., Columbian Bronze Corp.

GLOUCESTER, MASS., United Fisheries Co., 288 Main St.

HOUSTON, TEXAS., The Peden Co.

LOS ANGELES, CALIF., Pacific Goodrich Rubber Co., 1386 East Seventh St.

MIAMI, FLA., Hopkins-Carter Hardware Co., Miami Ave. and S. E. 2nd St.

NEW ORLEANS, LA., Arthur Duvics Sons, 122 Chartres St.
Alker-Donovan Co., Inc., 435 Camp St.
Stauffer, Eshleman & Co., Ltd.

NEW YORK, N. Y., Topping Bros., 159 Varick St.

NORFOLK, VA., Craig Brothers, 412 Rose Ave.

PHILADELPHIA, PA., Marine Equipment & Supply Co., 116 Walnut St.

SAN FRANCISCO, CALIF., Pacific Goodrich Rubber Co., 355 Brannan St.
C. V. Lane, Balfour Bldg.
Johnson, Joseph & G. M. Josselyn & Co., 56 Sacramento St.

SAN PEDRO, CALIF., Marine Hardware Co., 509 Beacon St.

SEATTLE, WASH., Pacific Goodrich Rubber Co., 1049 Railroad Ave. South.
Pacific Marine Supply Co., 1223 Western Ave.

TAMPA, FLA., Knight & Wall Co.

WASHINGTON, D. C., R. L. Fryer, Special Rep., The B. F. Goodrich Rubber Co., Cutless Bearing Division, 430 Transportation Bldg.

MONTREAL, CANADA, John Leckie, Ltd., 714 Notre Dame Street, West

TORONTO, 2, CANADA, John Leckie, Ltd, 77 Wellington St., W.

VANCOUVER, B. C., Fleck Brothers, Ltd., 110 Alexander St.

LONDON, ENGLAND, British Goodrich Rubber Co., 50 Pall Mall, London, S. W. 1.

FRANCE, Societé Française B. F. Goodrich, 221 Boulevard de Valmy, Colombes (Seine)

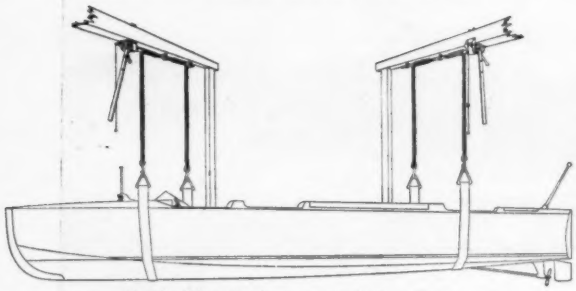
Goodrich *Cutless* Bearings

Another B. F. Goodrich Product

Keep Your Boat Out of the Water

SIMPLICITY BOAT HOIST

and MOORING SLING

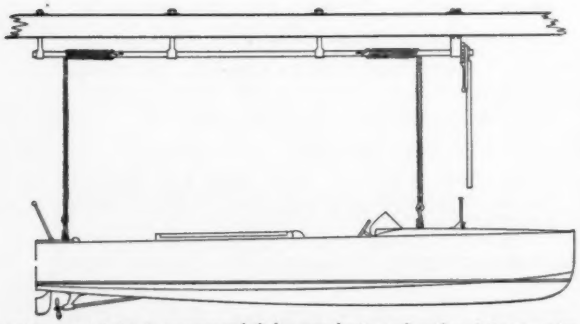


Double Sling for boats of 18 feet or more.
Lifting capacity 4,000 *lbs.*
Price standard type $75.00. *Slings and cables extra.*

EVERY experienced motor boatman knows that a boat when not in use should be removed from the water. Not only does an idle boat in the water accumulate marine growths and incipient rot, but it adds over 30% to its weight through absorption of water.

With the Simplicity Boat Hoist and Mooring Sling you can raise your boat from the water in a few minutes. Simply drive your boat over the broad rubberized canvas slings—give ratchet lever a few pushes and your boat clears the water, resting easily in the slings without strain. Furthermore, this hoist prevents your boat from banging against the dock or boat house slip. By giving your boat this well deserved care it will last longer.

The Simplicity Boat Hoist and Mooring Sling is one man operated and costs less than any other make of boat hoist. There are no parts to wear out. Once installed it requires no further attention.



This model hoist is recommended for runabouts and outboard boats under 18 feet in length. Lifting capacity 1,500 *lbs. Price, Standard Type* $50. *Cables extra.*

Write for complete details and advise size and approximate weight of your boat.

JOHN W. LOOSCHEN

64 East 35th Street

PATERSON **NEW JERSEY**

AN AEGEAN CRUISE

(*Continued from page* 70)

the port tack to a northerly blowing down from Mount Geraneia. All this time, the high, scattered clouds proceeded leisurely from southwest to northeast.

The Coast Pilot, which, for Greek waters, at least, offers little encouragement to small boat sailors, warned us that the region we were now entering was notorious for its terrific blasts of northerly wind. We were heading west for the entrance to the Corinth Canal, and in Kalamaki Bay, extending three miles east from the entrance, the wind sometimes blows hard enough to snap the chains of an anchored ship. But that is in winter and, presumably, never to the same ship twice.

Nevertheless, as we approached Kalamaki Bay we got our first taste of the white squalls of the Aegean, so-called because they come without warning other than the sudden white froth they kick up on the surface of the blue water. And yet they were nothing on this mild day to trouble anyone who casts an occasional eye to weather. You see the quickening of the whitecaps rushing toward you, and as the wind strikes and your rail dips under you either slack the main sheet or bring her up a bit. Four or five minutes of furious sailing—and suddenly you ride an even keel and wonder where the wind has gone to.

An hour or so of this gusty northerly wind, and I was again recording our changes of tack in the log book. Getting as far as "New slant from S.W.—tended jib sheets and backstay runners," we would find ourselves totally becalmed. While wondering whether or not to start the motor, we would be pounced upon again by the wind from the north.

When eventually we came to the entrance of the Corinth Canal the northerly was blowing with a will, and as there was nothing on the chart or in the Coast Pilot to tell me what conditions were like inside the jetty, we lowered sail and entered under power. A Greek single-masted kaiki had come to anchor just before us, and as we came up one of her crew was carrying a warp to the jetty. He paused long enough to point out the proper place for us to anchor and when he had made fast his own warp, kindly carried ours ashore. Thus we came to rest at the Corinth Canal.

We amateur sailors take pride in calling ourselves Corinthians but I have never ascertained whence the appellation derives. There are no yachts or amateurs in the Corinth of the present day, but if yachtsmen are all as kindly and obliging as this Greek professional then the term Corinthian takes on a very definite meaning. He not only took our line, but ferried me ashore to the toll house, and did me the honor to say that I speak French *bien*. As a matter of fact, my French is atrocious. But after I had finished with the canal authorities and returned aboard, I visited the kaiki in Hotspur's dinghy and we carried on a most enlightening conversation.

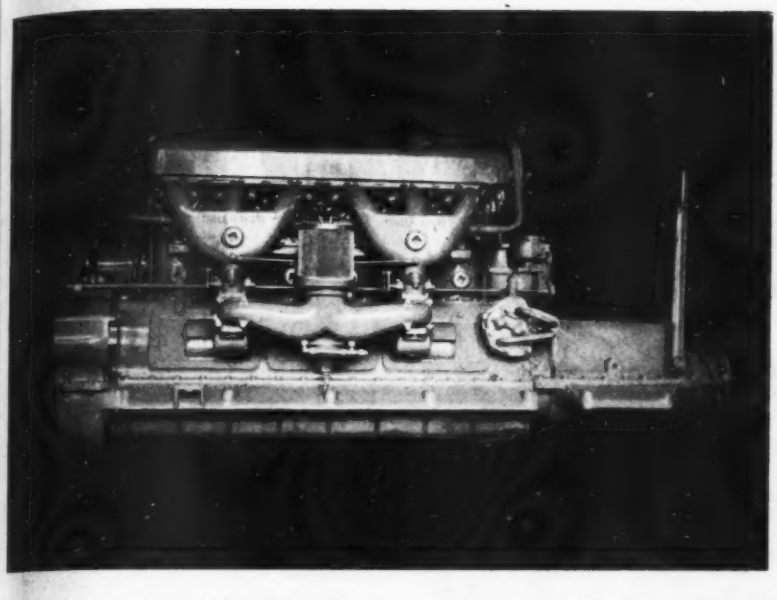
I told the Greek that Hotspur weighs seven tons, draws five and a half feet, cost 25,000 drachmes (which was an infernal lie), and he told me that the term kaiki applies to lateen-rigged vessels whether single- or two-masted, that this particular one measures fifty tons and draws seven feet; and that it had taken them three days to sail the thirty-five miles from Aegina. They were carrying a miscellaneous cargo of iron to Corinth and expected to wait a day for a tug to tow them through the canal. A round trip of seventy miles in one week without power—good enough, said my friend, for benzine is expensive and time is cheap.

My previous colloquy with the canal authorities had not been productive of as much information, for those who were present spoke only Greek, but from the red flag flying from the staff before the toll house I knew that passage of the canal was for the time being barred to us. I gathered that we must wait for certain steamers to pass through, and as the afternoon was then half spent it seemed advisable to make the east end of the canal our lie for the night. But I paid our toll of 145 drachmes (less than $2) filled in a slip listing the particulars of Hotspur's rig, nationality, crew, and origin, and prepared to go through at a moment's notice.

Such notice came at seven in the evening just as P. L. was getting dinner. Our French-speaking Greek friend called over that they were going through in tow of an auxiliary kaiki that had entered port behind us. From these boats and from other small craft in the harbor came the clank of windlass pawls as the anchors started to come home. So in a jiffy we changed our minds, cast off the warp, weighed, and got under way. The blue flag which had been hoisted for the admission of an Italian steamer was hastily hauled down behind her and the red again flew in our faces. We returned to anchor, but the native craft went ahead methodically with their windlasses and presently all were in motion, circling about outside the jetty. In half an

(*Continued on page* 94)

Advertising index will be found on 3rd last page



Model LM-6—a motor for express cruisers and fast runabouts, developing 200 horsepower at 1800 r. p. m. Bore 5″; stroke 7″. Weight only 1550 pounds. Air intake fully enclosed, assuring full protection against fire. May be had with either planetary or selective transmission.

Get the best possible speed . . the utmost cruising pleasure out of your boat with Hall-Scott power

Whatever the type of your boat . . . runabout, cruiser or yacht . . . there's a Hall-Scott motor that will bring the very best out of it for you . . . the utmost in speed and in pleasure.

And it's a pleasure that lasts, too, for back of it is a dependability and economy of operation that has become world famous.

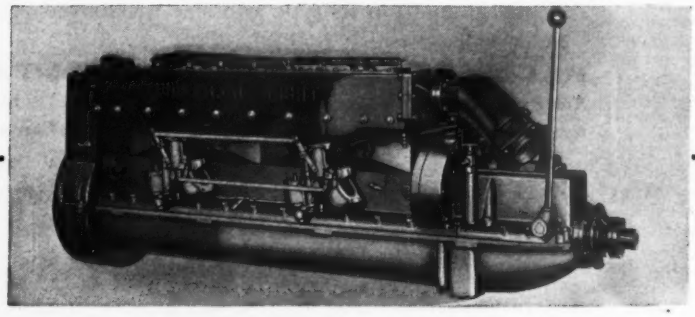
We'd like to tell you just what Hall-Scott will do for your boat . . . please mention its type and size when you write.

HALL-SCOTT MOTOR CAR COMPANY • Division of American Car and Foundry Motors Company • 217 West 57th St., New York. *Distributors for Long Island:* Freeport Boat and Engine Co., foot Cornwall Ave., Baldwin, L. I.

O. C. C. 46′ Cruiser—powered with 2 Hall-Scott Model HSM—6 motors of 110 horsepower each, which give it ample cruising speed with extreme comfort and absolute dependability.

IDEAL POWER

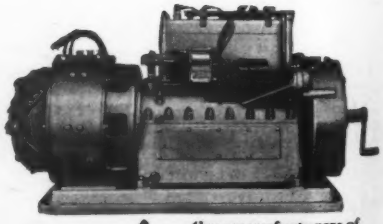
33-ft. Double Cabin Wheeler "Playmate," powered with a Universal Eight-115



The Universal Eight-115 H. P.

There's a Universal to meet your needs

Three Blue Jackets	40-44-47 HP
The Single Cylinder	6-8 HP
The Flexifour	10-15 HP
The Super Four	35-50 HP
The Sixes	77-88 HP
The Eight	115 HP



Universal Motor Co.

Also manufacturers of
MARINE ELECTRIC PLANTS
1½—3—4—5—7½—10—15—20 kw.

Advertising index will be found on 3rd last page

SURE

and here's why Wheeler chose the Universal Eight-115 for their "Playmate" because it alone met unusually exacting standards.

1 The motor had to be low in order to keep down the height of the bridge deck. The Universal Eight-115 is only 17 inches from engine bed to the top of the spark plugs. Any Universal takes less than its share of space in a boat. And its lowness means low center of gravity—a point you'll be glad of when you're in a seaway.

2 The motor had to be smooth. The Playmate is a pleasure boat, not a racing machine. Universal Straight Eight smoothness is simply amazing until you know the care with which vibration is eliminated through the use of only balanced crankshafts and flywheels and harmonized piston assemblies.

3 The motor had to be a brilliant performer. We'll let the results speak for themselves. Turning a three-blade, 16 by 12 propeller, the Universal Eight-115 drives this 33 foot cruiser at from 20 to 25 miles per hour. She'll throttle down to a smooth easy drift. She'll step out without a sputter the second you give her the gun. And she'll keep a-plugging hour in and hour out. *Universals perform.*

These exacting requirements are just the kind that Universal likes. Because Universals are 100% Marine Motors, designed to fit into tight places, built to stand the gaff of hard marine use, and created with that extra reserve of dependability which has made Universal trusted for a generation.

Universal MOTOR CO.

UNIVERSAL MOTOR COMPANY
210 Harrison Street, Oshkosh, Wis.
New York Showroom: 44 Warren St.
London Showroom: 22 George St., Hanover Sq. W.

UNIVERSAL MOTOR CO.
210 Harrison St., Oshkosh, Wisconsin

Please send me your 1930 year book containing 40 pages of valuable data on the new Universal Motors and their use.

Name .....

Address .....

City ..... State .....

The Hathaway

Resilient, Flax Packed STERN BEARING

SO much of the pleasure of motor boating depends upon the proper functioning of the power plant that it is the veriest kind of folly to stop short of tried and proved efficiency in the all important matter of the selection of the stern bearing.

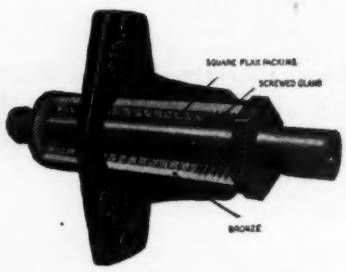
Hathaway Flax Packed Stern Bearings **have long since emerged from the experimental stage—a fact which is true of no other type of bearing, excepting the ultra-troublesome and discredited babbit and wood lined type.**

For twenty years *Hathaway Bearings* have been the invariable choice of experienced fishermen—of the most conscientious designers, who refuse to risk their own reputation on the performance of any but Hathaway Bearings.

Hathaway Bearings **have repeatedly penetrated the frozen north on the Schooner Bowdoin with the McMillan expedition. *Hathaway Bearings* have been in constant use for years on Capt. D. F. Mullin's schooner "Mary," on the famous Ketch "Blue Bill" designed by W. A. Hand, on the famous Alden designed cruisers, and on hundreds of pleasure and work craft, designed and owned by men who put efficiency above first cost.**

Check the advantages of *Hathaway Bearings* against other types—

Cushioned resilience—entire absence of vibration—no possibility of metal to metal pound—no sand grind or scoring—no overheating—no seizing—extreme simplicity, speed and economy of repacking—one to three hours work without removing bearing from boat—one to five years hard, constant service without repacking or adjustment.



Detailed information and prices upon request. If your dealer does not stock Hathaway Bearings, we will ship direct on receipt of your order. Dealers, write for prices and discounts.

HATHAWAY MACHINERY CO.
NEW BEDFORD, MASS.

AN AEGEAN CRUISE

(*Continued from page* 90)

hour the blue flag again shot up, and a voice from shore called in English, "Ready for you now." We were moving at once, heading for the narrow artificial rift between the 250-foot walls of rock.

Again the voice in English called to us, warning us not to catch up to the steamer whose bulk almost completely filled the fissure ahead of us, and to keep out of the way of the kaikis which had ceased chasing their own rudders and were following after. We throttled to three knots, and, breasting the one-knot current flowing southeast through the canal, crawled toward the purpling water of the Corinthian Gulf.

(*To be continued*)

CUTTING THE RABBET

(*Continued from page* 63)

which is the easiest and at the same time safest way to work. There is not nearly the danger of slivering the wood or of the tool following the grain.

W. B. M., Newburgh, N. Y.

AN EASY METHOD.

TO LAY OUT and cut a rabbet properly, if regular boat yard methods are followed, calls for experience in transferring points and skill in wood working. As witness to this statement one may cite the frequent references in boat building directions to truing up operations on the rabbet as the planking proceeds.

The method herein described, while admittedly unprofessional, is nevertheless practical and enables the amateur to proceed with the work confident that he will get a close fitting rabbet properly located. In most cases the rabbet along the keel is simply a bevel of the upper edge so that it is simply necessary to determine the proper bevel from the cross section and reproduce it along the keel, taking care of course to see that the bevel is the same as the thickness of the garboard. It is where this bevel runs out into the stem as a full fledged and mature rabbet the fun begins but leave the rest of the work until you are ready to plank. Now let me introduce to those who are not familiar with the virtues of this excellent tool, the Forstner bit. Procure a one and one-fourth inch one for about a dollar and note that it will bore a flat bottom hole without a center mark. (See Figure 2.) Assuming that everything is ready for planking, proceed as follows: Take the thin, spring batten which was intended for the garboard pattern and clamp in place, roughing to a fair fit to the stem. With a little piece of board, representing the difference in thickness between the batten and the planking, as a pencil gauge mark the outer line of the rabbet as shown in Figure 1. By means of a piece of cardboard and scissors take the proper angle at this point and then loosen the batten. With the Forstner bit bore a recess to the line as shown in Figure 2, clamping on a steady block for the bit as shown and using the cardboard gauge to get the angle. Any number of such recesses may be bored likewise up the stem and after that it is a simple matter to run them together with a flat chisel. By this method an amateur is taking none of the chances involved in transferring angles and lines from the plans. The Forstner bit may be easily sharpened with a three cornered scraper by scraping the inner side only of the circular lip.

J. F. C., Providence, R. I.

A CUT AND TRY SYSTEM.

TO THE AVERAGE amateur boat builder, the lines and figures covering the laying out and cutting of the rabbet line is as so much Greek. The plane line is often easy enough, but the bevel of the rabbet is a puzzle.

Professional builders very often have to true up a rabbet when they come to put on the ribbands and then later the planking. Hence, the amateur builder can go a step farther than this and simply approximate the bevel of the rabbet, but cutting one edge of it to the required depth.

In other words, to lay out the rabbet line on the stem as is sometimes given in plans, by applying values given on a vertical base line. If this is absent, the scale of inches on the plans will help to furnish the necessary data. The same idea is carried out in respect to the line on the keel. (Fig. 1.)

On the stem, the outer edge of the rabbet is cut to a depth equal to the thickness of the planking. The inner edge, however, is left with some stock to be cut away when the proper amount is indicated by the plank template applied after the frames have been set up and the procedure of fastening the ribbands is begun. The idea is clearly indicated in the top view of the stem, Fig. 1.

(*Continued on page* 96)

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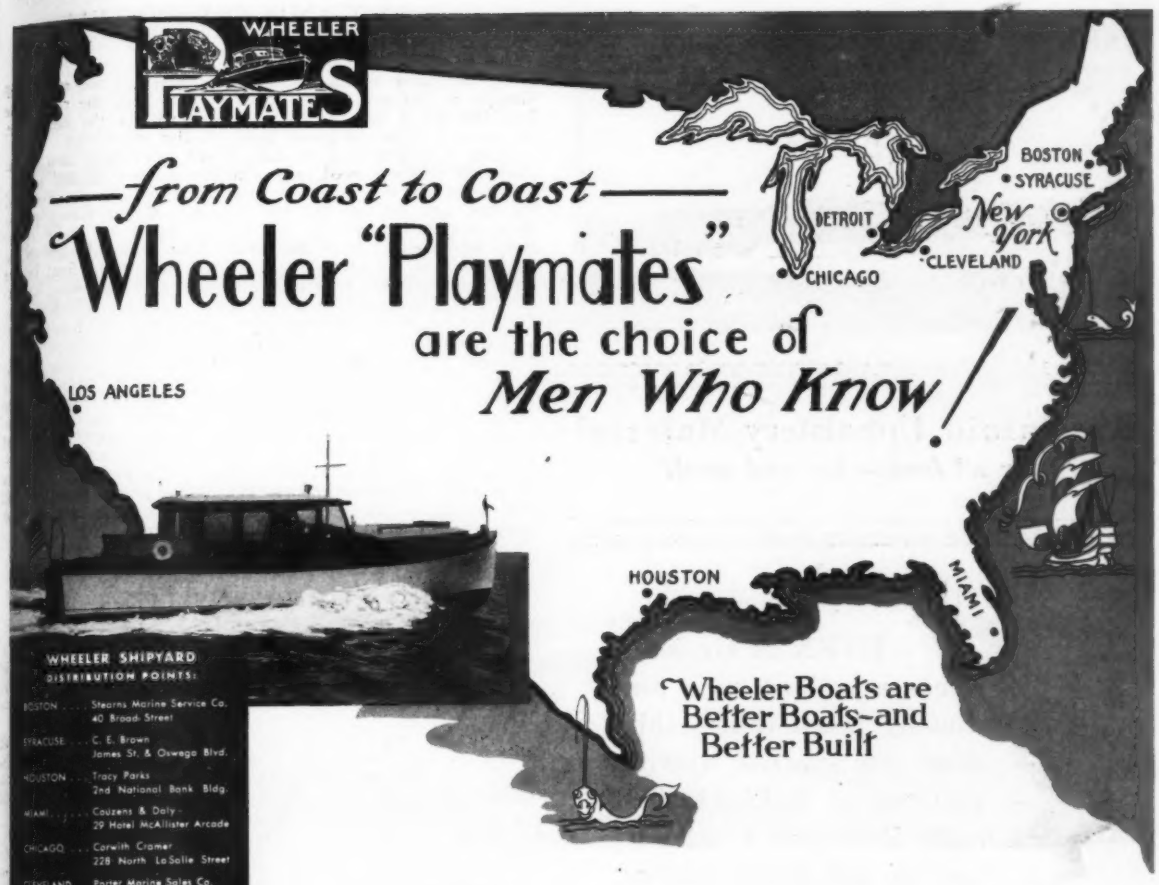
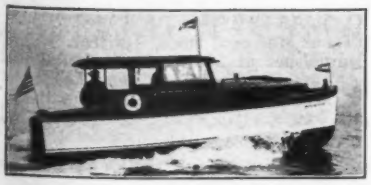


29-foot Wheeler "PLAYMATE"



26-foot Wheeler "PLAYMATE"

THE tremendous popularity of Wheeler "Playmates" is no longer confined to the Atlantic Seaboard. Straight across the Continent to the Pacific Coast, up in the Great Lakes Region, down along the Gulf, their fame is spreading.

Carefully planned, built with extraordinary care, perfectly appointed, and, above all, thoroughly seaworthy, these matchless boats never fail to meet the most exacting demands of their owners. They are responsive, easy to handle, always dependable, and give years of hard service.

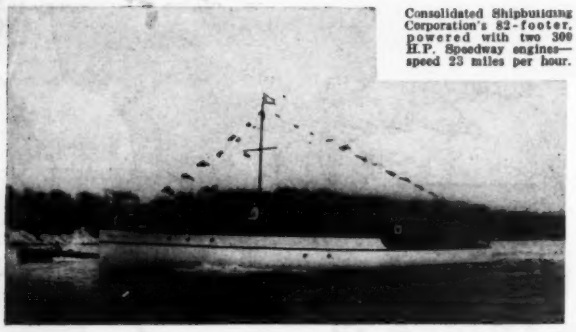
Among the fifteen models—ranging from 22 feet to 47 feet—you will find exactly the boat you want—for deep sea fishing, for coastal or inland water cruising, for fast commuting service, or for general sports.

You are cordially invited to visit our shipyard and see these boats "in the making." Demonstration by appointment.

SEND FOR CATALOG A

WHEELER SHIPYARD

FOOT HARWAY AVENUE
BROOKLYN, NEW YORK
PHONE MAY*flower* 7600



Consolidated Shipbuilding Corporation's 82-footer, powered with two 300 H.P. Speedway engines—speed 23 miles per hour.

Russialoid Upholstery Material
for all boats—big and small

EVEN on big boats, where a trained crew continually keeps things shipshape, the superior wearing qualities of RUSSIALOID make it the most satisfactory of upholstery fabrics. On small boats, too, its smooth, weatherproof surface, the ease of cleaning it and the fact that water, oil, gasoline and alcohol do not harm it, make RUSSIALOID the outstanding choice of leading boat builders. It is supplied in a wide range of colors to match any decorative scheme.

THE PANTASOTE COMPANY
INCORPORATED
250 PARK AVENUE NEW YORK

A CUT AND TRY SYSTEM

(*Continued from page* 94)

On the curve of the forefoot, the bevel of the rabbet will change, in fact will reverse itself. Hence, for the rest of the keel line the inner edge of the rabbet will be the deeper one, the portion to be cut away being on the outer edge.

Using a narrow quarter inch board where the turn of the garboard is pronounced, will simplify matters at this point.

Summed up, this procedure means that before the stem and the keel are put on the keel blocks and the forms put in place, the greater part of the rabbet can be cut under conditions which will not be laborious. The principal edge of the rabbet will be cut according to Hoyle, leaving the final cutting after the frame has been assembled and while one may have to lie down while cutting the remainder of the rabbet on the keel, yet the results obtained will more than offset any inconvenience which may be occasioned by following this method.

Unless a plank fits snugly at all points in its rabbet, there is bound to be trouble. Not cutting a deep enough rabbet—as this method advocates—is easily remedied by cutting away until the plank makes a perfect fit. If the rabbet is cut too deep or with too much bevel, the cut away stock cannot readily be returned to its place. The builder is then confronted with the possibilities of a continually leaking boat, or a long and laborious labor shimming under the planking. The amateur builder will reap better results by taking a little more time at the beginning, apply less science and cut as the situation demands.

J. E. M., Norwich, Conn.

GOLD CUP PLANS LOOK BIG

(*Continued from page* 53)

be raced at Red Bank on August 16. The entry of these two old displacement craft will make a most interesting and instructive comparison with the newer boats which are of the hydroplane type.

While the Gold Cup race itself may be the major attraction at Red Bank, yet it is not the whole show by any means. Classes and events have been scheduled for almost every type of craft, hydroplane, runabout, outboard and everything. A summary of the racing instructions follows:

DATES—August 16th and 17th, 1930, Red Bank, New Jersey.

RACE HEADQUARTERS—will be open at Red Bank Yacht Club, Red Bank, N. J., on August 14th. Until then all information may be had from Thomas S. Field, Jr., 254 Fourth Avenue, New York, N. Y.

R. C. 2 HEADQUARTERS—Hotel Molly Pitcher, Red Bank, New Jersey.

ENTRY BLANKS—May be obtained from Thomas S. Field, Jr., 254 Fourth Avenue, New York, N. Y.

ENTRIES—Should be filed with Thomas S. Field, Jr., 254 Fourth Avenue, New York, N. Y., previous to August 13th, 1930.

RULES—American Power Boat Association racing rules.

COPY OF OUTBOARD RULES—May be obtained from George Hoehn, 201 North Wells Street, Chicago, Illinois; A. P. B. A. RULES from C. F. Chapman, 959 Eighth Avenue, New York, N. Y.

CLUB MEMBERSHIP—All owners and drivers must be a member of some club affiliated with the American Power Boat Association.

REGISTRATION—Outboard drivers must register at race headquarters with W. E. Willis between 3:00 p. m. August 15th, and 10:00 a. m. August 16th.

VISITORS—Should register at the Red Bank Yacht Club.

TRANSPORTATION—of race boats to Red Bank should be arranged with Charles P. Irwin, Red Bank, N. J.

INSPECTION—Boats and equipment must be inspected previous to the start of the race by Bruno Beckhard.

RACE BOAT HEADQUARTERS—
(a) Gold Cup boats at Municipal Dock, Red Bank, N. J.
(b) 151-inch Hydroplanes at Municipal Dock, Red Bank, N. J.
(c) Runabouts at Municipal Dock, Red Bank, N. J.
(d) Outboards at Chas. P. Irwin Boatyard, Red Bank, N. J.

BADGES—May be obtained at race headquarters.

FUEL AND OIL—Arrangement for fuel, oil, ice and other supplies may be made at race headquarters.

CRANE AND HOISTING APPARATUS—will be available at the Municipal Dock and at Charles P. Irwin's boatyard.

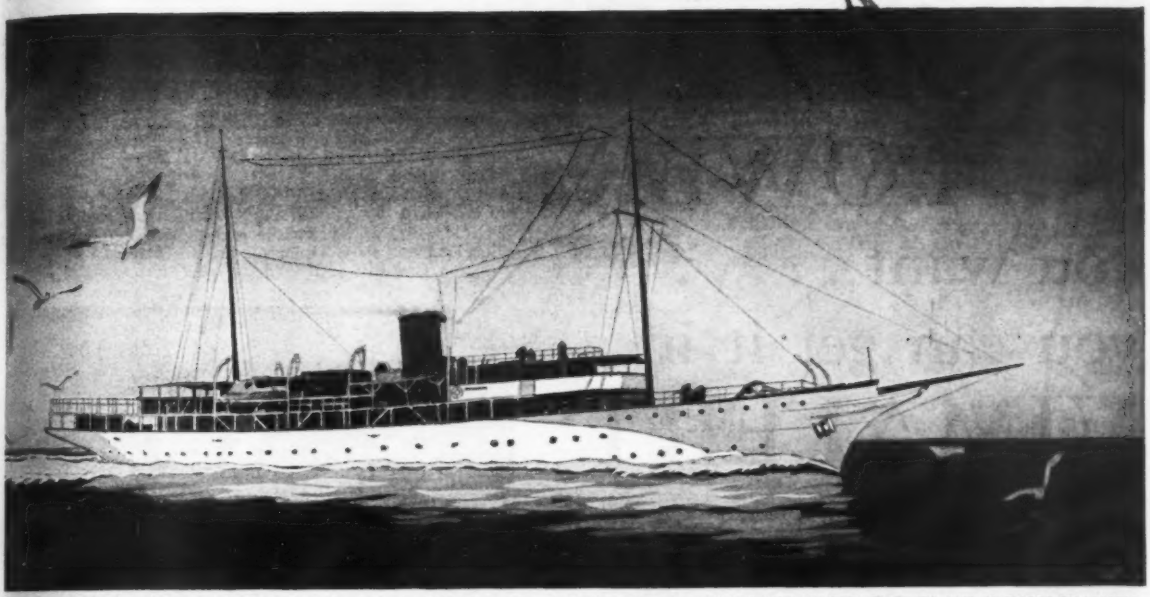
PATROLLING—of course will be taken care of by the U. S. Coast Guard.

(*Continued on page* 98)

Advertising index will be found on 3rd last page

QUIET

AS THE FLIGHT · OF A SEAGULL



THE "CAMBRIONA" DESIGNED BY COX & STEVENS, INC. AND J. H. WELLS, INC., POWERED BY TWO 1000 H. P. WINTON-DIESEL ENGINES, AND SILENCED BY MAXIM.

The Modern Luxurious "Cambriona" Equipped with Maxim Silencers

Aboard this luxurious pleasure yacht, passage will be quiet . . . as the flight of a seagull.

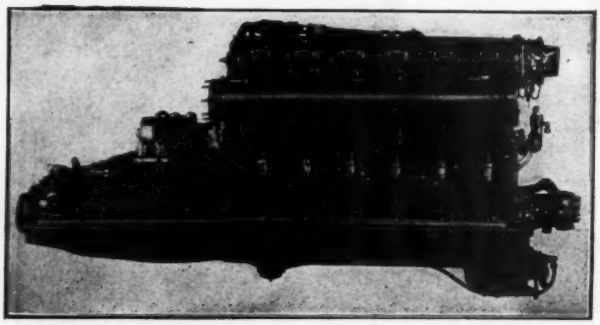
Standard Maxim Silencers have been installed on the exhausts of the two powerful Winton-Diesel engines, and also on the auxiliary units.

Silencers, for exhaust and intake noises of engines, have been installed in all types of boats for years. Available in stock sizes—installed on your boat within twenty-four hours after delivery to your shipyard.

Write for the new interesting marine brochure "Maxim and the Mariner."

THE MAXIM SILENCER COMPANY
Marine Sales Division
HARTFORD, CONN.

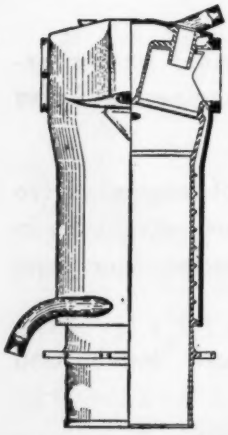
IMMEDIATE DELIVERY CAN BE HAD ON SILENCERS FOR ALL TYPES OF MARINE ENGINES



If it's POWER you want . . . . . you can get it in a VIMALERT

From a cold start to 425 H. P. at 2,000 R. P. M.'s is VIMALERT'S answer to your power requirements.

And no matter at what point you may wish your throttle, you can always be sure of positive and flexible control of this efficient and reliable engine.



The cylinder water jacket arrangement (illustrated to the left) of the VIMALERT ENGINES is especially designed to indefinitely offset corrosion resulting from salt water contact and spray. The material used for these jackets is Armco pure iron of 9/64 inch thickness, chosen for its ability to withstand corrosion more effectively than any other metal that could be utilized in this instance. This is only one of the many exclusive features found in this sturdy, dependable power plant.

425 H.P. at 2000 R.P.M.—Weight 1800 lbs.

THE VIMALERT COMPANY, LTD.
835 Garfield Ave. Jersey City, N. J.

GOLD CUP PLANS LOOK BIG

(*Continued from page 96*)

FIRE PATROL—Fire apparatus will be available on both shores and Patrol boats will be equipped with hand apparatus.

ACCIDENTS—There will be a hospital boat on the water at all times with a doctor and nurse aboard. The Riverview Hospital is situated on the River bank near the course and ambulances will be at the Municipal Dock.

PRESS HEADQUARTERS—will be at the Red Bank Yacht Club in charge of Emmett V. Maun; telephones and telegraph available, also transportation to Committee Barge.

RACING INSTRUCTIONS—Giving full information as to the time of start of the various classes, starting instructions, chart of course, etc., may be obtained at the race headquarters 24 hours in advance of the race.

ANCHORAGE OF YACHTS—All anchorage positions should be obtained prior to August 12th by writing to William J. Duncan, Red Bank Yacht Club, Red Bank, N. J.

SPECTATORS—Make arrangements for viewing the race by communicating with Charles A. Alexander, Red Bank Yacht Club, Red Bank, N. J.

HOTEL ACCOMMODATIONS—Should be reserved with Clarence A. Legg, Red Bank Yacht Club, Red Bank, N. J.

INFORMATION—During the regatta may be obtained at race headquarters from Holbrook Smith, Chairman of the Information Committee.

Californian, the Pacific Coast's hope in the Gold Cup Race. Commodore Dick Loynes, owner and driver makes an inspection before launching

PRIZES—In addition to the Gold Cup, the Red Bank Yacht Club Trophy, the famous National Trophy and many others, the prizes are probably the finest collection ever presented in Speed Boat Races.

PRESENTATION OF PRIZES—At the Hotel Molly Pitcher, Sunday evening, August 17th.

BROADCASTING—Full details of all races will be broadcast from the Committee Barge in midstream through loud speakers to the grandstands, Red Bank Yacht Club and Municipal Dock. It is planned to utilize a national hook-up to broadcast the races throughout the country.

VENETIAN NIGHT—Friday evening, August 15th, there will be a Marine Parade consisting of all local and visiting yachts. Visiting yachts will be supplied with Japanese lanterns free of charge. Stupendous fireworks display immediately after Marine Parade followed by dancing afloat and ashore.

R. C. DINNER DANCE—Hotel Molly Pitcher, Saturday evening, August 16th, for R. C. 2 members and visiting yachtsmen. INFORMAL.

RACING EVENTS.

Event No.

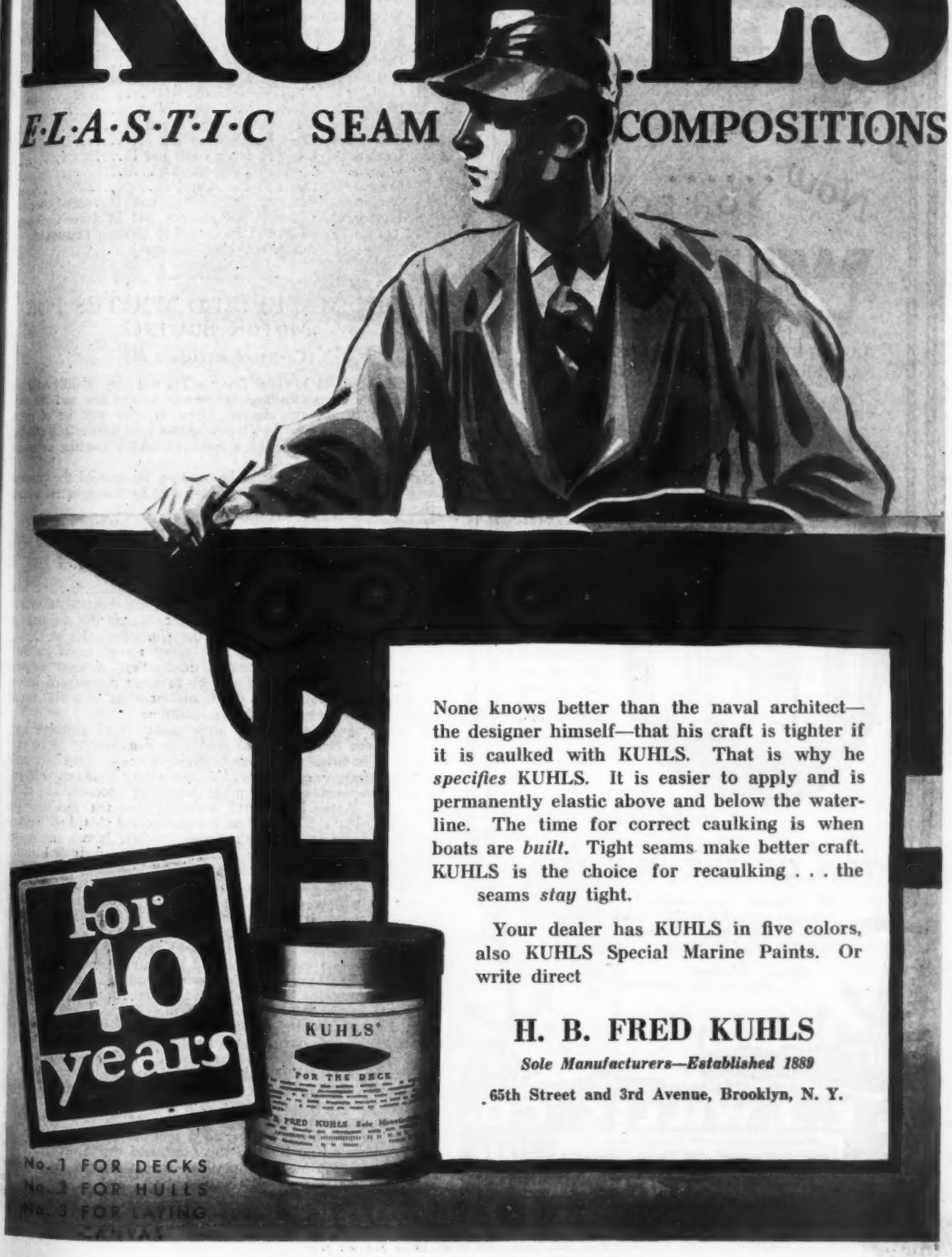
1. Gold Cup Class .. ..
2. 151-inch Hydroplanes, limited .....
3. 151-inch Hydroplanes, unlimited ....
4. National Sweepstakes (Grand Free for All) .....
5. International Class, 5½ litre .....
6. Stock Runabouts, Class A, Division II, not over 40 h. p.
7. Stock Runabouts, Class B, Division II, not over 60 h. p.
8. Stock Runabouts, Class C, Division II, not over 75 h. p.
9. Stock Runabouts, Class E, Division II, not over 135 h. p.

(*Continued on page 100*)

Advertising index will be found on 3rd last page

KUHLS

E·L·A·S·T·I·C SEAM COMPOSITIONS



None knows better than the naval architect—the designer himself—that his craft is tighter if it is caulked with KUHLS. That is why he *specifies* KUHLS. It is easier to apply and is permanently elastic above and below the water-line. The time for correct caulking is when boats are *built*. Tight seams make better craft. KUHLS is the choice for recaulking . . . the seams *stay* tight.

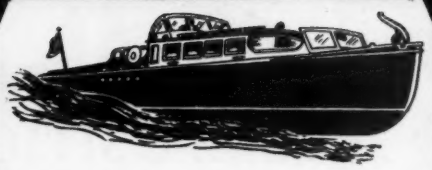
Your dealer has KUHLS in five colors, also KUHLS Special Marine Paints. Or write direct

H. B. FRED KUHLS

Sole Manufacturers—Established 1889

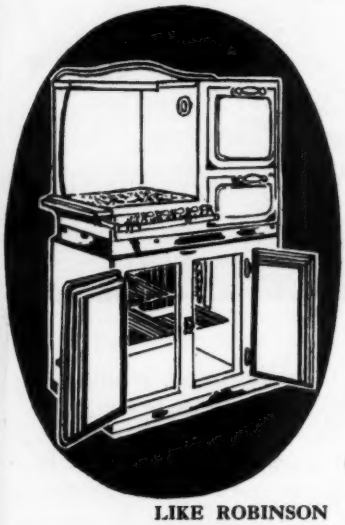
65th Street and 3rd Avenue, Brooklyn, N. Y.

ROBINSON
Seagull CRUISERS



Now ..... ON BOARD

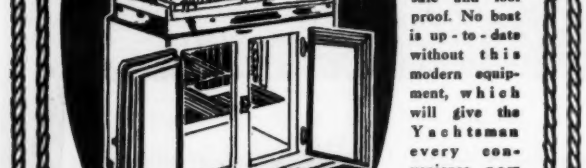
WILCO
BLU-FLAME
COOK STOVE WITH ELECTROLUX REFRIGERATOR COMBINATION



"WILCO" BLU-FLAME and ELECTRO-LUX COMBI-NATION are absolutely safe and fool proof. No boat is up-to-date without this modern equip-ment, which will give the Yachtsman every con-venience now enjoyed in the modern home.

LIKE ROBINSON
More than
75% OF THE BUILDERS
of modern standardized cruisers are now using "WILCO" Cook Stoves, either Blu-Flame Safety Gas or Alcohol type as standard equipment.

Ask any Yachtsman . . . . . he knows.
May we send you catalog?



The E. J. WILLIS CO.
Manufacturers and Distributors of
Yacht Equipment and Marine Hardware
EST. - 1888
85 Chambers St.-67 Reade St.
NEW YORK CITY

GOLD CUP PLANS LOOK BIG

(*Continued from page* 98)

10. Stock Runabouts, Class G, Division II, not over 200 h. p.
11. Stock Runabouts, Class H, Division II, not over 300 h. p.
12. Stock Runabouts, Class A, Division III, not over 40 h. p.
13 Stock Runabouts, Class B, Division III, not over 60 h. p.
14. Stock Runabouts, Class C, Division III, not over 75 h. p.
15. Stock Runabouts, Class E, Division III, not over 135 h. p.
16. Stock Runabouts, Class G, Division III, not over 200 h. p.
17. Stock Runabouts, Class H, Division III, not over 300 h. p.
18. Outboards, Class B, Division I and II.....
19. Outboards, Class B, Division III .....
20. Outboards, Class C, Division I and II.....
21. Outboards, Class C, Division III .....
22. Outboards, Class C, Division IV .....
23. Outboards, Class D, Division I and II .....
24. Outboards, Class D, Division III .....
25. Outboards, Class F, Division I and II.....
26. Outboards, Class F, Division III .....
27. Outboards, Class F, Division IV .....
28. Outboards, Class F, Division I and II Inter-Collegiate
29. Outboards, Class F, Division I and II Inter-Collegiate

(NOTE: Events 28 and 29 limited to Undergraduates of any Recognized College.)

JOHN MASEFIELD WRITES FOR MoToR BoatinG

(*Continued from page* 35)

as it will appear in MoToR BoatinG is not only vividly told but his nautical expressions and references to the sea and the ship are correct to the nth degree. The articles will be of great interest to anyone who has the slightest love of the sea running in his veins, whether he be a lover of motor boating or wind-jamming.

Not only will the articles be written by one of the greatest living writers but they will be illustrated by the greatest marine artist of the day—Gordon Grant.

CORINTHIANS GOING STRONG

Due largely to the untiring efforts of Commodore A. B. Bennett and Vice-Commodore Joe Galliher, the hearty cooperation of the members of the Board of Trustees, and the assistance of individual members of the club, the Corinthian Yacht Club of Washington, D. C. is going full speed ahead again and have accomplished wonders since the destruction of their property last year. It is a splendid tribute to what a unity of interest and action and the support of all the members of a club can do under more or less discouraging conditions.

A brand new basin for the accommodation of members' boats is now about completed and ready for occupancy. Boats have been brought in as fast as the individual berths have been made ready and have been quartered in temporary locations until permanent assignments can be made depending upon the size of the boat, etc. After a year of suspense for the members and strenuous labor and anxiety on the part of the Board of Trustees, they are all able to enjoy the fruits of their labors and see the entire fleet swinging to safe moorings in a comfortable harbor.

Dredging of the basin to the 300-foot line is finished and the wharves are rapidly approaching completion, after which the berth piles will be driven. Approximately 30,000 cubic yards of material was removed in the construction of this basin. A chart of the harbor has been prepared showing the locations of wharves and floats and the location, size and style of each berth from which members are able to make a selection. Permanent assignments will be made, insofar as possible, in accordance with the members' selections, governed of course on the basis of seniority and suitability of the boat to the berth. At the upper end of the basin several owners of speedboats and fast runabouts who belong to the club have banded together to provide suitable housing for their craft. In this manner of course, the work can be done more economically than if each owner contracts for his own individual house. A swimming float has been placed in Gunston Cove and the channel to it has been staked.

Due to its activity in the preparation of its new quarters the club at its last meeting adopted a motion deciding not to hold the President's Cup Regatta this year, and the American Power Boat Association has been notified to that effect. At the same time a motion was passed to allow the C. and P. section of the A. P. B. A. to use the Secretary of the Navy's Cup this year, to be raced for on the Severn River.

Advertising index will be found on 3rd last page

The assembly line—71 boats can be seen in parts of the drying room and engine installation room—these boats have passed through the woodworking, planking, decking, sanding, varnishing and miscellaneous departments—and have yet to pass through the fitting, trimming and testing departments—more than 500 boats were in process when this picture was taken.

HOW MOTOR BOAT COSTS ARE CUT BY MODERN QUANTITY PRODUCTION

Many editors and writers of boating, automobile and sporting papers have visited the great new tidewater plant of the Horace E. Dodge Boat & Plane Corporation. All have come away with the same feeling expressed by visiting Dodge Dealers. It requires a visit to this plant to understand just how huge it really is.

Figures fail to make plain how big this plant is. Only a boat builder can appreciate the tremendous size and the efficiency that have shipped as many as eighty boats in a single day—and that have gone on day after day producing thirty and forty boats for shipment.

One writer said, "The place is literally spouting boats." Another said, "I really did not know how big this plant is—why here on the loading platform, awaiting final test and shipment, are more finished boats than many well known builders ever have in all stages of construction."

Yet even a visit to a plant producing boats in such tremendous quantities is not alone enough to explain why Dodge Boats can be so low in price. In the process of manufacture the high quality of raw materials is especially evident — the genuine mahogany for planking, the clear white oak for frames. The careful skill in double planking bottoms, with the glue impregnated canvas, excellence in finish, minute inspection—all impress the casual visitor with the high quality, and the costliness of construction detail.

In this view of the loading platform about half the length of the plant is shown—with a train of cars in process of being loaded with Dodge Boats for shipment all over the world.

Quantity production alone is not the answer to such low cost for such high quality. Yet the same modern methods that cut time, also cut costs. Not one, but literally hundreds of boats are sent through at once. Machines as modern as skill can make them cut minutes, hours and days from the time once required to build a boat. One of the most costly things in the world is time—and by so shortening the time required to build a boat, Dodge has been able to cut costs to such amazingly low levels.

The great new plant is now literally "spouting boats." Dealers everywhere are now showing and selling Dodge Boats. If you would like to know more about this great new business opportunity — selling and servicing Dodge Boats — write for the new Dodge Catalog. Horace E. Dodge Boat & Plane Corporation, 21 West 46th St., New York, N. Y.; Works: Newport News, Va.

DODGE BOATS

Let Us Send You This Book!

The new Yachtsman's Guide is the only complete, up-to-the-minute yachting encyclopedia published. It contains 500 pages crowded with just the sort of practical information every motor-boat man wants. A copy of this invaluable volume should be aboard every boat and in the library of every yachtsman's home—on hand for immediate reference at all times. The following list gives you merely a partial glimpse of the wealth of material this book contains. Read it—think how it would help you!

All about engines—installation, ignition, vaporization and operation.

Hundreds of helpful hints on outfitting and overhauling.

More than 100 Motor Boatmen's Charts for the entire Atlantic Coast, Great Lakes and Canada.

Marine Laws—Rules of the Road at Sea.

What to do if the motor stops unexpectedly.

Times of high and low water and direction and velocity of tides in all ports.

Latitude and Longitude Tables, giving locations of over 1,000 points.

All kinds of marine codes, flags, etc.

Details of hundreds of cruise routes, description of ports and channels, marine signals, codes, flags, etc.

Characteristics of lights, buoys, fog signals, etc.

Numbering Law—How to obtain numbers for your boat.

What to do in a storm—to prevent collisions.

How to organize a yacht club—Constitutions and By-Laws and many other helpful features.

Send for Your Copy Today

"The Yachtsman's Guide" sells regularly for $1.50. Twelve issues of MoToR BoatinG would cost you $5.00 at single-copy prices. But by taking advantage of our special offer at once, you can have "The Yachtsman's Guide" and a whole year of MoToR BoatinG, for $3.50. (Two years' subscription including Yachtsman's Guide, $5.00.)

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I desire to take advantage of your Special Offer and get a copy of "The Yachtsman's Guide" with my subscription to MoToR BoatinG for One Year at $3.50. (Two years' subscription including Yachtsman's Guide, $5.00.)

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(Remit now and an extra issue will be added to your subscription.)

Regular subscription price $3.00 a year; two years $4.50
Postage outside of U. S. and Canada $1.00 extra a year

TOWING A DISABLED BOAT

(*Continued from page* 61)

rolling broadside to the weather. However, all agree that the rolling is uncomfortable if not dangerous. For all the boat lying broadside to the weather may not be in any immediate danger, she will drift much faster in this position and it is advisable to get out a sea anchor or a drag of some sort to hold her head into the weather, and to retard the drift while waiting for repairs or a tow, especially if near shore.

All motor boatmen are brothers, members of a great boating fraternity, although we may hail from many different ports and fly various flags. It is part of your obligation to the fraternity to help a brother in distress and the brother is obligated to return the favor, perhaps, never to his Good Samaritan, but to another brother in distress. Then the obligation is squared, but it is never fulfilled if a brother is deserted when in need of assistance.

Most motor boats are not suitable for towing in heavy weather. The modern express cruiser is too fast and too light for towing. It has ample power but its rudder is designed for the speed of the boat and when the boat is slowed down, is hard to maneuver, especially against the drag of the tow and the weather. The insufficient strength and size of the cleats and their poor position for towing also adds to the difficulty. A good boat for towing will have a heavy, deep hull, with but little top works for its size, ample power and good maneuvering qualities. A boat built for towing would have the towing bitts placed well forward of the propeller, in some cases almost amidship. This location of the bitts allows easy steering, especially when maneuvering. It is not expected that a pleasure boat will be built or equipped for towing but, the captain should know how to offset, in part at least, the disadvantages of his boat when he brings in a disabled brother. By making fast on the forward cleat and leading a bridle around the cabin the pull of the towline may be moved farther forward for rough weather work.

TOWING A DISABLED BOAT.

In fair weather, passing the towline and towing a disabled boat to port is a simple matter. In bad weather the situation changes and the ordinarily simple undertaking may become quite complicated and require the utmost care and good seamanship to accomplish the feat. Generally, the longer and heavier the towline the easier the towing will be on both boats. The sag of a long, heavy cable has the same effect as a long scope to the anchor. The sag acts as a spring between the two boats, eases off the strain and prevents to a large extent, the sudden jerks caused by the waves passing under the boats at different times. For a long tow in deep water, it might be advisable to bend the anchor cable to the towline without removing the anchor. The weight of the anchor will cause a good sag in the cable which is desirable at all times. The sag does not reduce the tension on the cable for steady towing, but it does supply an elastic link between the two boats which absorb the strain gradually without a jerk. No hard and fast rule can be given, but, the cable should always equal several boat lengths. Still, too long a cable will cause trouble by dragging. The proper length cable to be used between the two boats must be determined from experience and trials.

The running of lines in heavy weather is attended with considerable difficulty, especially when the boat to be towed can not maneuver to assist getting the line aboard. The disabled boat will probably lie with the wind and weather a little abaft the beam, which position is usual with boats in a sea without steerage way. The boat which expects to do the towing should maneuver to a position parallel to the disabled boat, either to windward or to leeward. In choosing the position, due consideration must be given to the rate of drift of the two boats and the length of time that will be required to get the line across. Where there is any great difference in the rate of drift of the two boats, the faster drifter should be to the windward at the outset. In maneuvering to pass a line, take care not to get so close to the other boat that the helm can not be put over to haul off without danger of collision. With the larger boats the line may be floated alongside the disabled boat without much difficulty. A good method is to float a sufficient length of line by life preservers or any suitable floats and run around the disabled boat, dragging the line astern and causing it to foul the disabled boat, when it should be readily picked up. Light lines can often be heaved across by running into the weather fairly close to the disabled boat's bow so that the wind will assist the line to carry across. The disabled boat passing the line in this case. A strong fish line or the lead line, to the end of which a weight heavy enough to throw nicely is attached, can be heaved a much greater distance and the heavier line hauled over and then the cable.

After the towline has been hauled across and made fast, extreme care is necessary in taking the strain. Go ahead for a few

(*Continued on page* 104)

Advertising index will be found on 3rd last page

Trim and graceful in every line,
so free from all vibration,
that even the mermaids rise to gaze
in envious admiration.

Smoothness—recognized on all seas

So smooth and effortless is the progress of the Cooper-Bessemer Diesel powered yacht that even the mythical mermaids gaze in admiration as she glides like a wraith through their domains. ¶ Modern yachtsmen who insist on the utmost in comfort afloat, demand the quiet, vibrationless performance of Cooper-Bessemer Diesels—the engines which are powering America's largest and finest yachts.

THE COOPER-BESSEMER CORPORATION

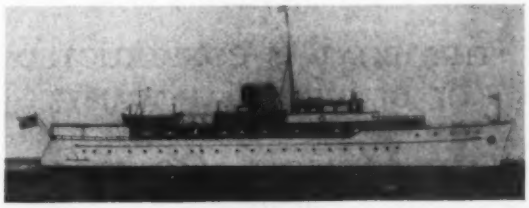
General Diesel Sales Offices: 25 W. 43rd St., Suite 301, New York, City

Plants: Grove City, Pa., Mt. Vernon, Ohio

COOPER-BESSEMER

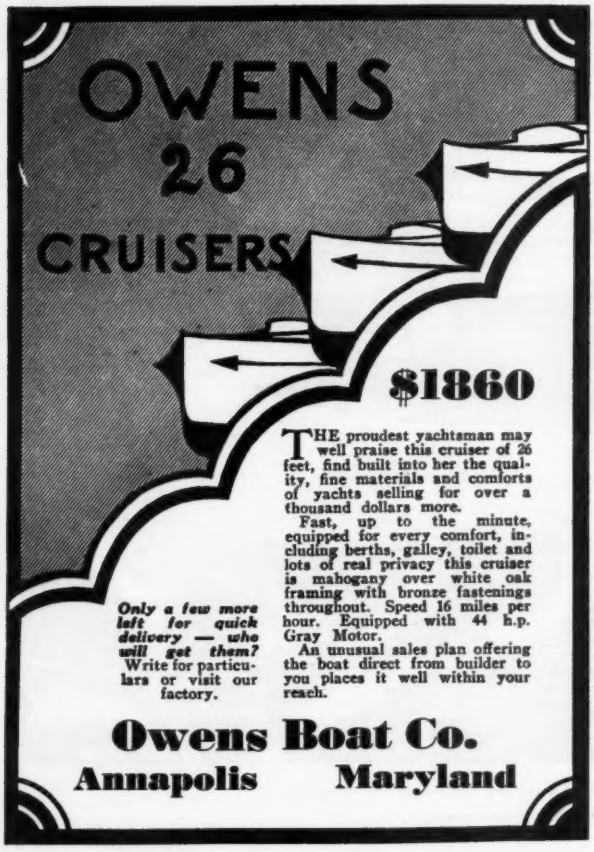
DIESEL MARINE ENGINES

·POWERING AMERICA'S FINEST YACHTS·



The New Diesel yacht now building for Mr. Frank Goodyear.—Designed by Henry J. Gielow, Inc., building at Bath Iron Works and powered with a pair of 550 H. P. Cooper-Bessemer Main engines and 50 K. W. auxiliaries

Advertising index will be found on 3rd last page



THE proudest yachtsman may well praise this cruiser of 26 feet, find built into her the quality, fine materials and comforts of yachts selling for over a thousand dollars more.

Fast, up to the minute, equipped for every comfort, including berths, galley, toilet and lots of real privacy this cruiser is mahogany over white oak framing with bronze fastenings throughout. Speed 16 miles per hour. Equipped with 44 h.p. Gray Motor.

An unusual sales plan offering the boat direct from builder to you places it well within your reach.

Only a few more left for quick delivery — who will get them? Write for particulars or visit our factory.

Owens Boat Co.

Annapolis Maryland

GENUINE MAHOGANY

Costs Less

In the long run
Because there is

Less sales resistance
When you can truthfully say:—

"THIS BOAT IS CONSTRUCTED OF GENUINE MAHOGANY"

THE MENGEL COMPANY
INCORPORATED
LOUISVILLE, KENTUCKY

TOWING A DISABLED BOAT

(*Continued from page* 102)

revolutions until the slack has been taken up, then go ahead slowly, gradually increasing the speed as the tow straightens out and is on the course of the towing boat, when the speed can be regulated according to conditions. In picking up on a tow always head into the wind if safe to do so. The tow will straighten out much quicker and gain steerage way quicker. If too close to shore, anchor until the tow swings around behind and then pick up on it.

There are many cases where it is advisable to use a bridle on the towing boat. Where a small boat attempts to tow a much larger one, steering will be easier and more certain if the cable is not led out through the stern check located almost directly over the rudder. The towline when in this position prevents the stern from swinging except by dragging the tow with it, and steering will be very sluggish if not impossible. Tugs carry their bitts well forward of the rudder in order that the stern may swing freely when towing. A motor boat with a heavy tow will steer much better if the towline can be made fast in a similar position.

When a boat must be towed on account of its inability to steer and the weather is heavy, the operation may become dangerous if due precautions are not taken to prevent the tow from swinging off too far to one side. Under these conditions the tow should use a drag such as a sea anchor or a bunch of oars and boards or life preservers lashed together and towed on a long line. Towing the bight of a long line will also assist in holding the boat on the course. The drag of this device will hold the bow up on the course and by shifting the line across the stern may be made to assist in steering.

A point to remember when towing another boat in heavy weather is to have the boats in step. That is, so that both rise and fall on the waves at the same time. The strain on the towline and the bitts of the two boats will not be as severe and the jerk occasioned by one boat forging ahead on the crest of a wave while the other is lagging in the trough will be greatly reduced. When both boats meet the waves at the same time the strain on the cable will remain comparatively even. When towing in a following sea the drag will prevent to a large extent, the tow running up on the line and fouling it. The towline must not be fouled. Should the towline be fouled to such an extent that it catches on the hull or rudder serious consequences will result. If able to steer, swing off to prevent fouling.

In every towing operation in rough weather, everyone must be right onto his job every minute. It is well to remember that letting go at less than a minute's notice may become necessary and due precautions should be taken. Have a man ready on both boats with an axe or a large knife to cut the line in an emergency and do not hesitate to use the axe rather than attempt to unfasten the line. Generally it will be most practical for the towed boat to let go, should the occasion arise. The line must be cut close to the bow, as the whip of the end as it goes out is dangerous and may take someone overboard or do other damage. Oil spread by the towing boat, will, in some cases, help to smooth down the crests and allow the tow to ride easier. A small boat with the weight forward can not be steered well. Get everyone aft and keep them there unless it is absolutely necessary that someone go forward. Then watch your opportunity and make it snappy. When towing, a small boat should have the weight in the stern to hold it down.

HELPING A DISTRESSED CRAFT.

THIS problem brings up many points that should be given careful consideration but to most boatmen decision on these points will come quickly. For the benefit of the less experienced, the following suggestions are given.

The velocity and direction of the wind and the roughness of the water should be considered, also the position of the boat in relation to rocks and shoals, the strength of the available towing line and cleats, the nearest harbor, etc. Observation and experience will answer these and with a little common sense precautions for safety, the boatman should not be afraid of the task confronting him.

Of course, in calm weather there will be little to do except throw a line or pick up his line, fasten it securely and pull it along. Fasten the line to pull the boat straight and have them steer the disabled boat if that be possible. Most cases are of this comparatively simple nature and easily handled.

If you are called upon for help, you should do whatever your own equipment is safely capable of. Don't attempt more than that or disaster may come to both boats. If you cannot tow it, stand by or go for help as may be thought best. If you suspect a boat is disabled and they do not call for help, you can offer to help but don't force your help upon them for that is often resented. And don't if you are a true sportsman, run to help another boat with the thought in mind of what money you will get out of it.

(*Continued on page* 106)

Red Wing Thorobred
THE MOTOR WITH POWER TO SPARE

THE MOST TALKED ABOUT MARINE MOTOR OF 1930

For Its Ability—

The Red Wing Warrior is the most talked-about marine motor today—not only for its unbelievably low price, but for its proven ability. Because, after all—it's what a motor will *do* that counts.

This powerful, rugged "six" is furnishing ample and satisfactory power in hundreds of heavy runabouts, work boats, large auxiliaries and cruisers up to 40 feet. It has all the endurance and reliability that have marked Red Wing motors for 30 years.

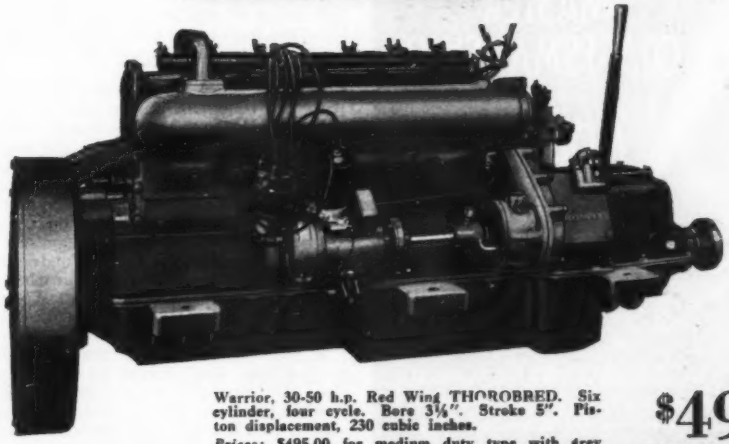
Two seasons of success even beyond expectation has firmly established the Warrior as the greatest marine motor value today.

For Its Price—

Only a tremendous production schedule makes it possible to offer the Red Wing Warrior at its low price, for in every detail of design, material and construction, it is of first grade. The Warrior is made with the same painstaking care and accuracy as all other Red Wing Thorobred marine motors.

It offers you abundant six-cylinder power and smoothness — dependability and long life. Yet the price is within the reach of every boat owner.

Judge the Warrior by what it will do. The low price gives no suggestion of its true value.



Warrior, 30-50 h.p. Red Wing THOROBRED. Six cylinder, four cycle. Bore 3¼". Stroke 5". Piston displacement, 230 cubic inches.

***Prices*: $495.00 for medium duty type with grey iron base. $570.00 for high speed type with aluminum base. Prices include electric starting motor, generator, instrument board, enclosed flywheel, Paragon 90% reverse gear built-in, Schebler carburetor with flame arrestor, rotary water pump, water cooled exhaust manifold, heated intake. Flange shaft coupling for 1⅛" shaft. Price with Robert Bosch magneto ignition $45.00 extra; or for double ignition system $60.00 extra.**

$495
COMPLETE WITH ELECTRIC STARTER

Write for catalog showing* 19 *THOROBRED sizes,* 4 *to* 150 *h.p.

RED WING MOTOR CO., RED WING, MINN.

EASTERN DISTRIBUTORS:

W. H. Morston Corp., 1043 Commonwealth Ave., Boston
Verrier, Eddy Co., 201 East 12th St., New York, N. Y.
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Copper, Brass and Bronze Sheets . . Rods . . Tubes

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MASTER
CRAFTSMANSHIP
AT
MODERATE
COST
Before ordering your new sport runabout, by all means, write for illustrated literature describing the new ATLAS runabouts in 19, 23, 26 and 30 foot lengths. Up to 30 and 45 skimming miles per hour are neatly tucked away into the racy lines of each model. They are designed by master craftsmen to provide the utmost in riding comfort and ease of control at all speeds. You'll thank yourself for having written for full information. Because, in addition to their ultra-custom design, ATLAS prices are exceptionally moderate—as low as $1575 for the 19 foot, fully equipped all-mahogany runabout.
"Atlas"
Dealers write for special dealer proposition.
ATLAS BOAT CORPORATION, MENOMINEE MICHIGAN

TOWING A DISABLED BOAT

(*Continued from page* 104)

When called upon for such services in bad weather, by the time you reach the disabled boat you will have observed the wind, water and position, and can judge how best to approach them to get a line aboard. When approaching the boat keep your own bow toward the storm and don't let your engine stop. You can get in front of the boat and drift back to her by regulating your own power yet you are in a position to quickly pull away in case you get too close. You may come up behind her and pass to one side a safe distance away, but keeping your own bow into the storm. Never maneuver your own boat so that it will be broadside to the storm when close to the other boat or you may be thrown together.

From the front or the side position you should be able to throw a line aboard, using the wind to help you. Throw a light line first and it may be necessary to attach a small weight to it to help the throwing. If there is no one aboard the disabled boat capable of catching the line, or if it is a boat that has broken from its mooring with no one aboard, about the only thing left is to swim for it. Don't attempt this unless you can withstand rough water. Put a life belt on and tie a light line around your waist and on reaching the disabled boat you might climb aboard by way of the mooring cable if it is still over the side. Otherwise it will be difficult to get aboard a high-sided boat. Get to the rear of it and possibly the waves will bring you in reach of something. Let those holding your line keep a close watch on you.

With the light line across, the towing line can be pulled in either direction. Better use the other fellow's rope if it seems strong enough. If there is any doubt as to the strength of the towing cleats, reinforce them by running the rope to some strong part such as the engine bed or even run the line all around the hull. It is heart-breaking to have the rope break or a cleat pull out after so much work getting ready.

Let out as much line between the boats as possible as the weight will take up sharp pulls as the boats buck. In some cases it is safe to tie the line to the anchor of the disabled boat and have them let out enough anchor line that the anchor will not drag when towing but in case the rope breaks the anchor will fall and hold the disabled boat. Use care in regulating the length of anchor cable let out, in such cases. The weight of the anchor on the line acts somewhat like a spring and makes for ease in towing. Keep out of reach of the tow line if it should break. They sometimes whip back with considerable force and will do damage if they hit.

With the line ready for towing, before you pull away to the full length of the line, arrange with each other some signals for slow and high speed and stopping, either by hand, light or whistle unless the distance and the storm are such that calling will be readily heard.

The storm may be such that the safest thing is to head into it with just enough power to keep in about the same location and merely mark time until the weather eases up. If it seems safe to actually move, then head into the nearest protected water until the weather makes towing safer, regardless of previous destination of either boat.

These suggestions anticipate very bad weather but they can be modified to suit existing conditions. Heavy rain may beat down a rope thrown as previously suggested and you can try floating the end by means of a life belt and maneuvering the boat so that it will drift in the right direction where it can be picked up with a boat hook. If you can get aboard, you might be able to help them get running again and that will be more satisfactory to both parties.

If you are the man on the boat being towed home by some good fellow, don't forget to thank him when you cast off the line. Of course you can offer to pay for the services or the gasoline or make him a present of some piece of equipment or cigars, etc., but don't forget the thanks. Don't be like the man we towed about 15 miles to a mooring near ours. He called for the tow but when he threw the line off he quickly went below without a "Thank you" or even a wave of the hand. And he never did later as he might have if he had forgotten in the excitement of the moment. Fortunately, in the sport of motor boating, we don't have many people like that.

L. R. K., Philadelphia, Pa.

RED WING DISTRIBUTORS

The Knight & Wall Company of Tampa, Florida, have recently been appointed by the Red Wing Motor Company as distributors for Red Wing Thorobred Marine Engines for the west coast and central portions of Florida. The Knight & Wall Company have an extensive marine hardware department under the supervision of J. M. Keeley, and a close contact with all boat builders in their territory. A good sized stock of Red Wing engines will be carried on the floor at all times.

Advertising index will be found on 3rd last page

CHRIS-CRAFT, too, adopts EVERDUR and TOBIN BRONZE

After every conceivable test, EVERDUR Screws have been selected by the Chris Smith & Sons Boat Company for fastening the planking on all Chris-Craft 20′ to 48′ models inclusive. Struts and stringer, stuffing box and keel bolts are also of EVERDUR, a metal combining the strength of steel with unequalled resistance to corrosion. Anaconda Nickel Silver is used for metal trim on all models.

For the new 17′ model, Chris-Craft has standardized on TOBIN BRONZE propeller shafting; for many years the practically unanimous choice of leading boat builders.

It should be of interest to those who build or buy quality boats like Chris-Craft, that nearly all leading manufacturers have standardized on Anaconda Metals because they provide consistent dependability.

THE AMERICAN BRASS COMPANY
General Offices: Waterbury, Connecticut

ANACONDA COPPER
BRASS ANACONDA BRONZE

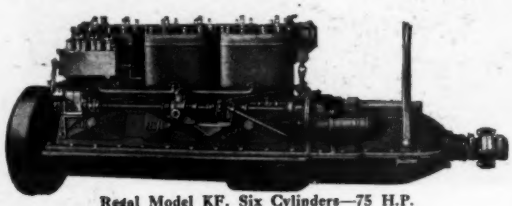
TOBIN BRONZE* and EVERDUR* are manufactured solely by The American Brass Company, and their trade marks are registered in the United States and in foreign countries. Furnished in sheets, wire, tubes, and rods, including turned and straightened shafting. Leading fabricators are prepared to furnish EVERDUR screws, bolts, nuts, castings, and fittings.

ENDURANCE

an Outstanding Characteristic of

REGAL MARINE ENGINES

Regal's reputation for endurance is based on a record of twenty-nine years of dependable service in all types of craft throughout the world. They deliver a maximum of smooth, flexible and reliable power with minimum service and upkeep.



Regal Model KF. Six Cylinders—75 H.P.
Bore 5½". Stroke 7"

There is a Regal model ideally suited to your boat. Install it now—its staunch construction and modern refinements will appeal to you; its faultless efficiency will be a lasting pleasure.

18 MODELS—2 to 75 H.P.

One to Six Cylinders

Send today for catalog

REGAL GASOLINE ENGINE COMPANY

Established 1901

74-82 WEST PEARL ST. COLDWATER, MICHIGAN

On the left is shown our 8½" incandescent searchlight, and on the right is the 7" incandescent searchlight, both with pilot house control. Our combination red and green running light is shown in the upper right corner. These illustrations show the latest type of modern construction.

Catalog I—incandescent. Catalog A—arc.

THE CARLISLE & FINCH CO.

261 East Clifton Ave. Cincinnati, Ohio

KORANETTE—A COMFORTABLE YACHT

(Continued from page 37)

with duplicate sets of 7½ kw. Winton generators for furnishing the necessary current and exceptionally large battery capacity operating the two Frigidaire ice boxes, sewage ejection system, pumps, electric windlasses, lighting system, etc.

As Commodore Hower intends to use his new ship the year round, both north and south, and will probably spend some time in Georgian Bay, she is completely heated throughout with a modern hot water heating system, designed to maintain normal living temperatures even during extreme cold.

The crew's quarters forward in the orthodox manner are particularly neatly arranged with accommodations for nine men including three officers' staterooms. There is a mess room for the officers, service by dumbwaiter from the deck pantry and the deck pantry and galley are intentionally isolated from the living quarters of the boat which is therefore free of the usual objections of a galley adjacent to sleeping quarters. The owner's quarters aft consist of two double staterooms, two large single staterooms and three bathrooms, and a dressing room opening into the owner's double stateroom. The owner's personal room extends the full width of the boat, just aft of the engine room and is of unusual size and appointments.

It is interesting to note that in the decoration of these rooms the owner has not gone in for the lighter modern decoration but has retained the mahogany and white so pleasing to the real stagoer. The beauty of the rooms is largely in their simplicity, their large panel effects and the exceptionally finely grained African mahogany that is used throughout below decks.

A beautifully panelled mahogany deck house gives the ship an appearance rarely found, the deck house in the forward end being surmounted by the pilot house, and the after end by means of French doors opening onto an after deck of unusual proportions and giving wonderful accommodations.

At the forward end of the deck house is located the dining room panelled in fiddleback mahogany of the rarest pattern. The ceiling is beautifully panelled and has already attracted much attention. The furniture is all of solid mahogany with the chairs padded with upholstery. Any tendency to monotony due to this one color scheme of wood is relieved by the rich window drapes of blue and gold, the general effect being very pleasing.

Aft of the dining room is located the entry passage and the galley. In the galley, in addition to an oil burning large Shipmate range, there is located a charcoal broiler and an unusual feature is presented by the walls and ceiling of the galley being entirely covered by planished monel metal.

Aft of the main deck there is an unusually large social hall. This is panelled in American walnut which has been most carefully selected for grain and figure and is probably as beautiful a piece of woodwork as can be found on any of the modern yachts. At the forward end of the room a lively painting of a ship under full canvas breaks up the plainness of an all wood wall. Luxuriant divans, chairs, convenient tables and stands complete the appointments of this room which is also set off by the richness of the hangings. At the after end of the social hall there are large double French doors which swing outward completing the vista of the after deck as seen from the social hall.

All interior decorating was carried out by the studios of David B. Costuma of New York City, and it is worthy of note that in addition to the luxuriousness of these decorations and the splendid taste used, everything aboard ship is of material approved for sea-going use.

The Koranette is unquestionably the ideal connecting link between houseboat and fast cruiser. She is a type of which the Laders Marine Construction Company have built a considerable number and have excelled themselves on this particular craft. No expense has been spared in the outside finish of the boat. The decks are of teak and she carries a flotilla of four boats, an owner's launch, a crew's launch, a rowing tender and a punt. These have all been kept down to approximately the height of the low pilot house from which the helmsman has unusual forward vision and can clearly see the bow of his boat from his steering station.

151 CLUB MEETING

At the annual meeting of The 151 Club, held at Albany, N. Y. on July 3, it was voted that the 151 class boats refuse to start in any race where outboards are allowed to start, except in the free-for-all events.

It was also voated that regatta officials appoint an efficient measurer to measure all 151 engines that are to compete in a sanctioned race to ascertain if the engines are within the 151 cubic inch piston displacement.

It was also voted that the 151 class races consist of three heats of either five or six miles each.

Advertising index will be found on 3rd last page

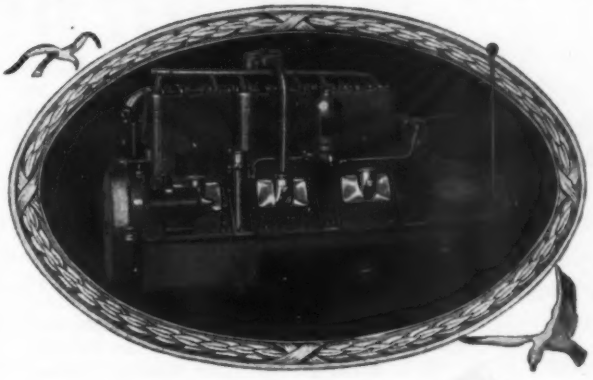
She has found

SUN ~ HEALTH ~ SPORT

SELF RELIANT, sweeping aside outmoded conventions in her new-found freedom, she depends upon her own knowledge to choose the smart hull and the brilliant reliable motor that bring SUN, HEALTH, SPORT to her hours of play.

It is not profound knowledge of mechanics, but instinctive association of beauty and worth, keen sense of correctness in proportion and detail, unerring intuition which tell her at a glance that the SCRIPPS is the motor that will best perform.

From every angle, the mechanical perfection of the SCRIPPS is revealed in the compact simplicity and graceful sturdiness of its contour. Every line suggests power, endurance, dependability. The



SCRIPPS motor provides that smooth rhythmic power which imparts spirited action, ease of handling and unfailing reliability to the hull of her choice.

Illustrated is SCRIPPS MODEL 202—200 H. P. the largest of 15 models from 15 H. P. up, for high speed and medium duty. Also available in reverse rotation for "Twin" installation.

~ ~

The wide acceptance of SCRIPPS motors by so many prominent builders of standardized craft who offer them as standard or optional equipment is significant of SCRIPPS unfailing dependability.

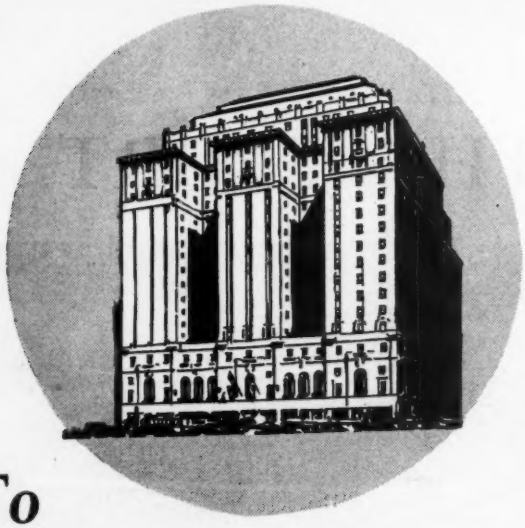
A. C. F.●
BANFIELD
CHRIS-CRAFT●
CORSAIR "26"
DART●
DITCHBURN●
GAR WOOD "40"
HACKERCRAFT●
KING SEA-SKIFFS
LUDDOO DREAM BOATS●
MATTHEWS●
MINETT-SHIELDS
ROBINSON SEA GULL
SEA LYON "40"●
STEPHENS
SUNBEAM "46"
WHEELER "PLAYMATES"●
Foreign
BRITISH POWER BOATS
OSBORNE-CRAFT—*England*
CLAUS CRAFT—*Germany*
CRANTIERS NAVAL
EXCELSIOR
DEEFJUOLS—*France*
ORTHOLAN—*Argentine*
●*Optional*

SCRIPPS MOTOR COMPANY, 5819 LINCOLN AVENUE, DETROIT, MICH.

SCRIPPS

• THE MOTOR THAT CROSSED THE ATLANTIC •

SALES AND SERVICE: NEW YORK, N. Y., Holt Marine Engineering Corporation, 611 West 125th St.—BOSTON, MASS., Noyes Marine Company, 305 East Congress St.—PHILADELPHIA, PA., Marine Equipment & Supply Company, 116 Walnut St.—CHICAGO, ILL., Staugaard Marine & Supply Co., Motor Boat Mart, Navy Pier—MIAMI, FLA., J. Frank Knorr, 528 N. W. Seventh Ave.—NEW ORLEANS, LA., Arthur Duvic's Sons, 122 Chartres St.—SEATTLE, WASH., Atlas Engine Company, 69 Columbia St.—WILMINGTON, CAL., Yacht & Motor Sales Corporation.



To help you enjoy NEW YORK

SITUATED in the heart of the Grand Central Zone, The Roosevelt offers an ideal home for your New York visit. The Great White Way, the leading theatres and night clubs, and America's most famous stores and specialty shops are within easy walking distance. The Roosevelt Grill for dining and dancing is a New York institution; Guy Lombardo's Orchestra a nationally known feature. We can secure cards of introduction for you to some of the celebrated golf courses in the Metropolitan district, arrange for your theatre tickets or current sporting attractions and in many other ways render special services that will add to your comfort and pleasure.

—and finally, don't forget that as a unit in the United Hotels of America the standards of the Roosevelt are assured.

*Before you visit New York, write The Roosevelt for this free amusement guide.

The ROOSEVELT

EDWARD CLINTON FOGG, *Managing Director*
Madison Avenue and 45th Street, New York City

GOTHAM LIFE, published each week, gives the latest facts about theatrical attractions, movies, churches, lectures, museums, sports and other current attractions. Tell us when you plan to visit New York and we will send you the copy issued nearest that date with our compliments. Also rate folder on request.

UNITED HOTELS

FOURTEEN RACE TO BLOCK ISLAND

(*Continued from page* 52)

handicaps based on the measurement of the boats.

This year some sixteen fine cruising boats had entered for the contest on July 12, together with twenty sailing vessels ranging in size between the extremes permitted under the conditions. It was suggested after the race of the previous year that it would be desirable to start the motor boat division according to their handicap times and this scheme was followed out. The slower boats were started beginning at 10:30 at varying intervals throughout the forenoon. A gap in the time allowance schedule permitted the fleet of sailing vessels to get away promptly at noon and also permitted the race officials on board the committee boat Sea Doll to enjoy their luncheon. The faster boats then got away with the last boat Sonny III, leaving at 4:20 in the afternoon, almost six hours after the first boat had started. Despite this apparently great difference in starting times, this faster boat was able to reach the finish line practically two hours ahead of the first boat to start, having made the trip to Block Island in under six hours.

At the Block Island end of the course, were Commodores Jenkins and Kennelly on board the latter's express cruiser Adele. They took the time of finish of each boat and did not have much rest during the early evening while the motor boats were coming in. The first boat to reach Block Island was the new Elco Cruisette, Maid O' Rye, owned by S. D. Platt of the American Yacht Club, which having started a little after two o'clock reached Block Island in about seven hours and eleven minutes. Her speed according to this time figures at 14 knots which is the top limit for fast cruisers as provided by the racing rules. The second boat in was Sonny III, a 48-foot Dawn cruiser belonging to A. D. Phelps of the New York Athletic Club and from then on for the next hour the boats

(*Continued on page* 112)

THE MARINER'S GUIDE

The sixth edition of the Navigator or Mariner's Guide put out by the New Jersey Paint Works is now available for free distribution to yachtsmen who might care to receive a copy of this valuable handbook. It consists of 118 pages of important information for seamen and yachtmen, including signals, bell time on shipboard, an explanation of the buoy system, chronometer and watch comparisons, dead reckoning, visibility of objects at sea, finding time of noon, handling steam vessels, line of position, how to ascertain latitude and longitude, plotting position lines, stowage of cargo, weather signals and much other information of value. Persons desiring a copy of this booklet should address the New Jersey Paint Works, Wayne and Fremont Streets, Jersey City, N. J.

KEEP A LOG

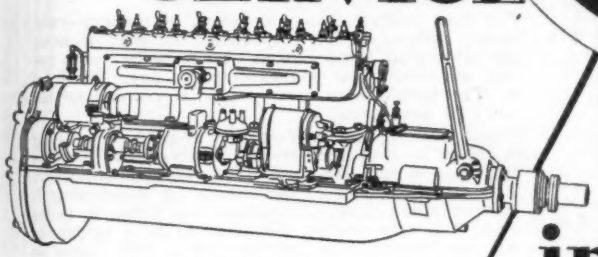
Cruising season is here again, yachts and motor boats are in commission, and their owners are going off on cruises and short trips, some perhaps for just the week-end, others for a two weeks' vacation and other more fortunate ones for even longer periods. In any case, a seamanlike and systematic planning of the trip requires that a regular log be kept for each day's run and this contributes, too, to better navigation. These logs run anywhere from the hastily made and inadequate notes in a notebook to a very elaborate and detailed record of every incident of the journey in a very pretentious and specially prepared log. However, it is quite possible to keep a complete and valuable record of the more important happenings during the course of a day's run without too much trouble by jotting down notes on a well prepared log sheet. In order to assist yachtsmen in keeping a good record of their cruise the Malleable Iron Fittings Company of Branford, Connecticut, manufacturers of the Branford Midget Lighting Plant and Battery Charger, have prepared a very convenient pad of these log sheets which may be secured by writing the company at the above address.

A NEW BOOK

A new book entitled, By Way of Cape Horn, from the pen of A. J. Villiers, author of Falmouth for Orders, full of the romance of the sea, has just been published by this entertaining and popular author. Mr. Villiers, a real seaman, has derived his material for this colorful story from an actual voyage he made not long ago aboard the full-rigged ship, Grace Harwar. She is one of the doomed windjamming Cape Horners, a passing fleet of wheat carriers which is fighting a losing battle against the terrible Cape Horn seas and the competition of steam. The story is a narrative of her exciting five months' voyage from Wallaroo, Australia to Queenstown, Ireland.

Advertising index will be found on 3rd last page

There's PALMER SERVICE in his port



THE distribution of a Standardized Boat is successful as long as it does not extend beyond the service facilities of its power plant. The list of Palmer dealers below is of interest, therefore, to buyers and builders of boats. Added to this list are sub-dealers in practically every port of importance.

For over thirty-five years, Palmer Bros. have built engines that are the standard of excellence of marine motors. When you buy a boat, be sure it is equipped with a Palmer Engine. Palmer Engines are satisfactory engines . . . they function perfectly, are dependable and are serviced by Palmer representatives conveniently located.

PALMER BROS. ENGINES, Inc.

COS COB, CONN.

DISTRIBUTORS

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89 Third Ave. between 12th and 13th Sts.

Baltimore, Md.
514 E. Pratt St.

Boston, Mass.
Rapp-Huckins Co.
138 Beverly St.

Philadelphia, Pa.
631 Arch Street

Seattle, Wash.
Pacific Marine Supply Co.

Portland and Astoria, Ore.
Oregon Marine Supply Co.

Portland, Me.
Portland Pier

Norfolk, Va.
Gas Engine & Boat Corp.

Miami, Fla.
B. E. Schubert, 1008 North West 8th St. Road

Jacksonville, Fla.
112 South Ocean Street

Tampa, Fla.
Ft. of Whiting St.

San Francisco, Cal.
Boardman and Flower
1740 Van Ness Ave.

Vancouver, B. C.
V. M. Dafoe, 1100 Powell St.

Biloxi, Miss.
Kennedy Bros.

THE PALMER LINE

YT1—1-cylinder	2 h.p.
PNR1—1-cylinder	6 h.p.
PNR2—2-cylinder	12 h.p.
PNR3—3-cylinder	18 h.p.
PNR4—4-cylinder	24 h.p.
ZR1—1-cylinder	7 h.p.
ZR2—2-cylinder	18 h.p.
ZR3—3-cylinder	30 h.p.
ZR4—4-cylinder	40 h.p.
F2—2-cylinder	18 h.p.
F3—3-cylinder	25 h.p.
F4—4-cylinder	35 h.p.
F6—6-cylinder	50 h.p.
NK2—2-cylinder	25 h.p.
NK3—3-cylinder	35 h.p.
NK4—4-cylinder	50 h.p.
NK6—6-cylinder	80 h.p.
Little Huskie—4-cyl.	15 h.p.
Power-Boy Six—6-cyl.	40 h.p.
P. A. L.—4-cylinder	25 h.p.
Green Witch—6-cyl.	150 h.p.

MARBLEHEAD ANTI-FOULING GREEN BOTTOM PAINT

Saves Its First Cost Many Times Over

because it covers twice the Surface, lasts a long time, and is the most effective Bottom Paint produced.

"The highest grade product that can be used."—JOHN H. WELLS, Inc.
"Gives perfect satisfaction."—THE MATTHEWS COMPANY.
"Will use it exclusively."—HACKER BOAT COMPANY.
"We are satisfied with the results obtained from this remarkable paint."—HENRY J. GIELOW, Inc.
"Unable to find anything that will stand up as your paint does."—GEO. LAWLEY & SON, CORP.

STEARNS-McKAY MFG. CO.
Marblehead, Mass.

OCEANS of FUN

with this Sporty Runabout at one-third the usual cost

The boat you've always dreamed of owning—runabout, cruiser, outboard speedster, sailboat or most any craft your fancy desires—can now be yours for only one-third what you expected to pay. Think of it! The Brooks Plan gives you $3 worth of boat for every $1 you spend.

Here's how it's done: You send at once for catalog showing 55 different Brooks Boats—pick just the craft you want. We send it to you knocked-down. You save 2/3ds your boat money by assembling it in your spare time. Thousands are doing it every year. It's very simple. No need to be a carpenter. All you require is a hammer and a little space in your garage, cellar or yard. Have the boat you've always wanted. Send 10c today for the new Brooks catalog giving full information on 55 different models—cruisers, runabouts, speedsters, sailboats—most any craft you want.

BROOKS BOAT CO., INC.
Dept. H3
Saginaw West Side, Michigan

FOURTEEN RACE TO BLOCK ISLAND

(*Continued from page* 110)

finished within a few minutes of each other and nine had finished before 11 P.M. had been ticked off on the clock. The remainder came in at close intervals during the next hour with the single exception of Revelation owned by T. F. Egan which had been regarded as a possible winner and a very serious contender owing to her very large time allowance. Unfortunately something went wrong with the gasoline supply and she was delayed and did not finish until after 5 A.M. Sunday morning and accordingly was the last motor boat to complete the journey.

The sail boats were favored with fair weather and a steady wind and made the hundred mile run without difficulty although naturally it took them longer than it did the motor boats. The first of the sail division to reach the goal was the 50 foot schooner Viking, belonging to F. Jay Wells of the Chester Yacht Club in Nova Scotia. This fine schooner had competed in the race to Bermuda and had only returned to Long Island Sound waters a few days prior to the start of the Block Island Race, she was made ready to start and made a very fast run down the sound. Her time allowance, however, was sufficient to take first place from her, although she secured second place on corrected time.

The winner proved to be the yawl Playmate, owned by Robert D. Teller of the Bayside Yacht Club. She enjoyed the benefit of a good time allowance and by reason of this was able to take first place on corrected time. The rest of the fleet all arrived during the next few hours with the delay in the arrival of the late comers due to the change in the tidal conditions and falling off of the wind so that they were unable to make as good progress as those which had finished earlier.

The race committee of the yachting department took full charge of the race and is composed of F. W. Horenburger, Chairman, and Messrs. Jackson, Jimenis and Tucker. They were assisted by Commodores Jenkins and Kennelly who acted as timers at the Block Island end of the course. As is usual a dinner was served to the captains and crews the evening before the race.

A summary of the entries in the motor boat division follows:

BLOCK ISLAND RACE—100 NAUTICAL MILES—JULY 12, 1930

			Rating	*Allowance*	*Start*	*Finish*	*Position*
Rusalka	J. R. Reuling	Bayside Y. C.	36.90	6:04:56	10:30:00	12:03:33 A.M.	13
Wampeague	Wm. C. Croll	N. Y. A. C.	37.04	6:02:27	10:32:29	10:20:45	5
Revelation	T. F. Egan	Stuyvesant Y. C.	38.44	5:37:40	10:57:16	5:25:20 A.M.	14
Andy	D. C. Anderson	Bayside Y. C.	39.08	5:27:12	11:07:44	10:13:14	3
Wanderer II	W. L. Liefeld	N. Y. A. C.	54.85	2:23:18	2:11:38	11:51:28	12
Skipper	J. D. Pettit, Jr.	N. Y. A. C.	50.83	2:59:19	1:35:37	D. N. S.	
Alesto	Hendricks & Bobrick	Manhasset	51.07	2:57:01	1:37:55	11:47:06	11
Rita	C. H. Sanford	N. Y. A. C.	51.83	2:49:52	1:45:04	11:26:27	10
Liz II	W. J. Cranwell	N. Y. A. C.	55.91	2:14:01	2:20:55	10:18:41	4
Spendthrift II	E. J. Zukor	Colonial Y. C.	56.37	2:11:02	2:23:54	10:37:03	7
Maid O'Rye	S. D. Platt	American Y. C.	54.17	2:29:02	2:05:59	9:17:02	1
Myrel	P. C. Samuels	Colonial Y. C.	62.57	1:27:03	3:07:43	10:58:52	9
White Shadow	Wm. C. Alley	New Rochelle Y. C.	59.33	1:48:51	2:46:05	10:47:08	8
Bettis	H. D. Lewis	Bayside Y. C.	68.63	0:51:46	3:43:10	10:29:15	6
Nadine	G. A. Loomis					D. N. S.	
Sonny III	A. D. Phelps	N. Y. A. C.	76.36	0:14:53	4:20:03	10:05:44	2

Announcing

A NEW TEXACO MOTOR OIL

STILL CLEAR, STILL CLEAN, STILL GOLDEN

WITH A

LONGER LASTING "CRACK-PROOF" BODY

In the Spring of 1926 The Texas Company revolutionized motor fuel values for the nation by introducing the new and better Texaco Gasoline—the original dry gas. Today, maintaining its leadership in the petroleum field, The Texas Company makes another outstanding contribution to the motorized world.

(See following pages)

TO OUR MILLIONS OF CUSTOMERS

THE Texas Company again demonstrates its leadership in the petroleum field with the introduction of a vastly superior, new product—a motor oil with a longer life, and so clean and pure that it will measurably improve the performance of any automobile or motor-boat engine. This new oil revolutionizes lubrication values as completely as the new and better Texaco Gasoline, the original "dry" gas, revolutionized motor fuels in the Spring of 1926.

Because of its carefully worked out combination of crudes and special processes of refining, this new lubricant is without precedent. It retains all the famous characteristics of the former Texaco Golden Motor Oil. It is still free from hard-carbon-forming elements, free from wax and other impurities. It flows freely at zero. In addition to all this it is "Crack-Proof" and provides the more complete protection demanded by the improved high speed, high compression engines of today.

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A CULMINATING ACHIEVEMENT

in the science of refining

THIS new "Crack-Proof" Motor Oil represents the culminating achievement of years of research and experimentation. An oil of this type has long been desired by the motorized world both on shore and afloat. It remained for The Texas Company to perfect a distillation process that enabled it to combine all the outstanding qualities of the major crudes in a single motor oil. Because of its world-wide resources and tremendous refining facilities, The Texas Company is able to offer this new lubricant everywhere today through its 40,000 dealers.

All Texaco now sold is the new Texaco. Manufactured in five grades—C, D, E, F and G*. They correspond in body to the Society of Automotive Engineers (S. A. E.) viscosity ratings and cover a sufficient range to give every type of engine the maximum in lubricating efficiency. Despite its revolutionary character and far greater lubricating value, this new and tougher Texaco is sold at 30 cents a quart* in all our 48 States.

30¢ a Quart

*35¢ for Grade G

the New **TEXACO MOTOR OIL**

LONGER-LASTING. . "CRACK-PROOF"

THE TEXAS COMPANY TEXACO PETROLEUM PRODUCTS

Better Performance

When you use Champion

The Better Spark Plug

Better performance is the reward of an ever-increasing proportion of particular boat owners, the world over, who are changing to Champion Spark Plugs.

Champions are their choice, overwhelmingly, simply because they release this better performance, *so definitely and conclusively*, from every marine engine.

To realize the important part that spark plugs play in better engine performance, it is interesting to note that the world's greatest marine racers are practically unanimous in their insistence for Champions.

They have learned *from experience* that Champions give them more speed, greater power and utmost dependability.

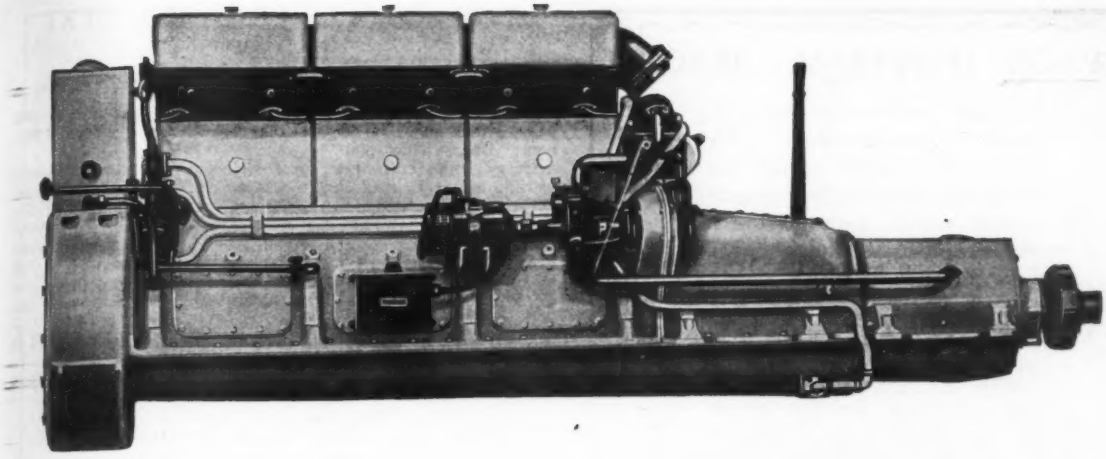
If you are not now using Champions in your boat, we invite you to prove to yourself, beyond all doubt, that they *do* improve performance by installing a set. Notice, also, the easier starting and new smoothness that come to *your* engine through their use.

You are interested in performance. Boat owners the world over say that Champions do improve it, and that regular renewals of Champions every year sustain it at topnotch. But judge this for yourself by installing a new set.

This better performance is no further than the nearest of Champion's 100,000 dealers. His chart shows the *one* Champion which expert factory engineers recommend for your engine. He will be glad to serve you.

Champion *Spark Plugs*

TOLEDO, OHIO **WINDSOR, ONTARIO**



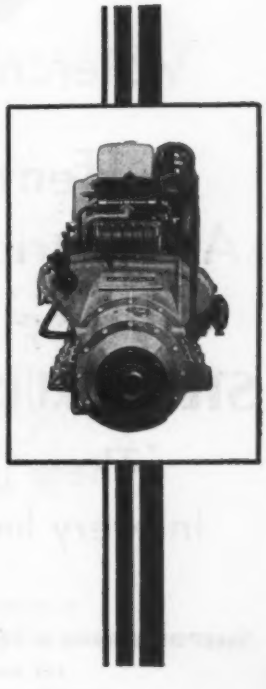
6 Cylinders-*High Speed*-Light Weight

180 H.P. BUDA M.A.N. DIESEL

WITH OR WITHOUT REDUCTION GEAR

The Buda-M.A.N. Marine Diesel is a 4-stroke cycle type of airless fuel injection. It is a full Diesel, requiring practically the same space as a gasoline engine of equal horsepower. It is of clean-cut design and eliminates accessories and drives, such as magnetos, distributors, starting compressors, etc. No preheating devices are necessary. Electric starters and generator are furnished as regular equipment.

The 180 HP engine is 6½" bore x 8¾" stroke, with Morse type reduction gear, 2½ to 1. This model develops 173 HP at 800 RPM and 180 HP at 1000 RPM. Also supplied in 4-cylinder size (6" x 8"), developing 100 HP at 1000 RPM.



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HARVEY { Chicago / Suburb } ILLINOIS

Established 1881

SAVAGE UNIVERSAL BRACKET

For an auxiliary power unit, ready in any emergency, or for trolling at a smooth, economical speed. Recommended by all outboard motor manufacturers. Adaptable to all kinds of boats. Price $20.

HARLEY *SPEED* MUFFLER

Eliminates noise without creating any back pressure or reducing the r. p. m.'s. For all motors from 5 to 500 h.p. Inexpensive and easy to install. Made entirely of non-corrosive metal, will not rust out.

Agencies for the Savage Universal Bracket and the Harley Speed Muffler are now available. If you are a dealer, write today for further information. We are sole distributors.

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BOAT COMPANY, LTD.
585 BOYLSTON ST., BOSTON, MASS.

HOLL-CRAFT

Watercraft De Luxe

Featuring
All Electrically Equipped
Diesel Powered
STEEL CRUISING YACHTS

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In every line of business"

FOR FURTHER PARTICULARS ADDRESS
SHIPBUILDING & MOTOR EQUIPMENT, Ltd.
143 Tremont Street
BOSTON MASSACHUSETTS

THE SEATTLE-PRINCE RUPERT RACE

(*Continued from page* 48)

12:57½ p.m.; Winifred 1:16 p.m.; Mary-Mar-Ann, 1:18¾ p.m.; Kittiwake, 1:58¼ p.m.; Argosy, 2:02 p.m.; Tyee, 3:08¾ p.m.; Zize, 5:00¼ p.m.

Every boat received a royal welcome from the big crowd waiting at the Prince Rupert Rowing and Yacht Club float, and whistles were pulled down by every craft in the harbor. The principal event was a banquet and dance by the Prince Rupert Rowing and Yacht Club on Wednesday evening, at which prizes were awarded. It took the judges from 8 o'clock Wednesday morning until 6:20 Wednesday evening to go over all logs, question skippers on doubtful points and make final decisions.

The awards, omitting gasoline and oil given virtually all in varying amounts, were:

First Over All—Maidie, Prince Rupert Rowing and Yacht Club Trophy.

First Division, (25 to 40 feet)
Bolinder, first. Prince Rupert Trophy (cup).
Triton, second. Seattle Yacht Club Trophy.
Kittiwake, third. Storm Guide.
Zize, fourth. Andirons.

Second Division, (41 to 48 feet)
Maidie, first. Prince Rupert trophy.
Winifred, second. Tacoma Yacht Club trophy.
Mary-Mar-Ann, third. 70-pound Anchor.
Buccaneer, fourth. Binoculars.

Third Division (49 to 100 feet)
Nisbet, first. Prince Rupert trophy.
Rowdy, second. Olympia Yacht Club trophy.
Tyee Scout, third. Metal sport boat.

Longest Non-Stop Run.
Rowdy, first. Miniature lighthouse.
Bolinder, second. Barometer.

Navigation.
Triton. Queen City Yacht Club Trophy.

Fastest Cruiser.
Buccaneer. Blue Green gasoline trophy. Thermos bottle.

Smallest Cruiser.
Zize—Battery.

Largest Cruiser.
Nisbet.—Air whistle.

Last Boat In.
Zize. Sir Thomas Lipton Trophy. (cup.)

By Thursday afternoon, all the motor craft were away again from Prince Rupert. Only one or two returned directly to Seattle or their home ports in Olympia, Tacoma and Shelton. The others scattered toward Alaskan ports, or to cruise the almost numberless bays an dnilets of the northern waters.

The skipper of Winifred ceased to be a navigator, and turned to cooking in earnest in his well-appointed galley. He began with a breakfast Thursday morning of ham and eggs for one and all the contestants in the race who would come, and townspeople as well. He followed by frying cut throat and rainbow trout, with hot biscuits, baking salmon, and one morning achieved such heights that his crew of six consumed 132 hot cakes, with such trifles as a few skillets of bacon, ham and a bucket of Guatemalan honey. As an amateur cook, he achieved greater popularity than as an amateur navigator.

All contestants in the Seattle – Prince Rupert cruiser race were amateur navigators, by the way, who had learned as they might the reading of their charts, and plotting of courses.

All however, were not amateur cooks. The skipper of the little Zize, Charles J. Blanc, is a famous chef. He decided to cook during the race, and gathered a crew to navigate Zize. The crew were amateurs, and all passed out of the picture in Queen Charlotte Sound, due to selection of the roughest hour to cross. Nothing daunted, Chef Blanc ceased cooking, seized the wheel, and brought Zize through with honor and glory. He received three separate prizes on arrival at Prince Rupert, including the consolation prize awarded for the last boat to finish.

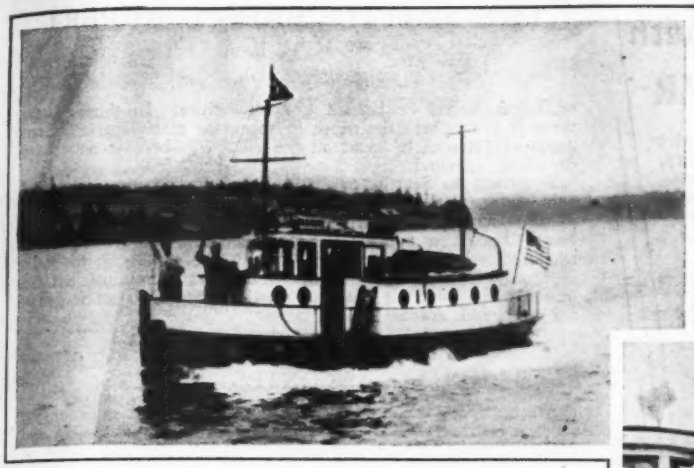
Sea Scouts of Tacoma and Seattle participated in the race this year, on Tyee and Triton, and acquitted themselves with much credit. They are members of the sea branch of the Boy Scouts of America.

Several of the competing boats, notably Mary-Mar-Ann, made up their crews from family groups—father, mother and children.

And to enjoy the sunny Summer cruising in North Pacific waters, which is becoming every year more popular, it is not necessary to enter the Capital to Capital Race of 1,000 miles. Trips may be made for a day, or over the weekend from a score

(*Continued on page* 120)

Advertising index will be found on 3rd last page



The 44-foot cruiser "Maidie" and her prize-winning crew—Capt. Jack Power, Charles H. Knowles, John D. Zandt and Charles H. Smith.

3 out of 4 first places for Mobiloil

in International Cruiser Race from Seattle to Prince Rupert, B. C.

For the third straight year Mobiloil-lubricated boats swept the field in the annual Pacific Coast Cruiser Classic.

Jack Power's 44-foot "Maidie" captured the Prince Rupert trophy for 1st place in the Over-all Division, as well as first prize in Division Two. The "Bolinder," 1929 Over-all winner, placed first in Division One. And in addition the Mobiloil-lubricated "Buccaneer" won the prize for the fastest cruiser.

Wherever motor boats are raced, Mobiloil rides with the winners. It is specifically recommended by 53 of America's 80 motor boat engine builders.

No other oil is so widely distributed. Mobiloil is sold in every state in the Union and in all civilized countries. You will find complete stocks wherever you cruise.

Look for this sign

VACUUM OIL COMPANY

Makers of high quality lubricants for all types of machinery

Mobiloil

Modernize Your Boat with a MORSE REDUCTION GEAR

A Morse Straight Line Reduction Gear will give your boat more speed and maneuverability, together with lowered maintenance and operating costs. Power at the propeller is increased and vibration is materially lessened. These gears are the ideal equipment for modern type power plants.

Morse Straight Line Reduction Gears are available for both Diesel and slow speed gas engines, as well as the higher speed motors. Installation drawings, and complete information will be mailed free upon request. Please state size and type of power plant when writing.

Photograph showing relative size of two new heavy-duty Morse Reduction Gears.

Morse Chain Co.
7601 Central Ave.
Detroit, Michigan

MORSE
REDUCTION GEARS

LAST FORMS

CLOSE AUGUST 10th...

The largest International Regatta in the history of motor boating will be held in Detroit August 30, 31 and September 1. Entries from England, France, Germany, Canada and the United States will contest in various inboard and outboard races. The official 100-page program will be the D. Y. C. Main Sheet. Will you be represented? Write or wire your space reservations today.

W. D. EDENBURN, *Editor*
5-216 General Motors Bldg., Detroit

The Main Sheet

THE SEATTLE-PRINCE RUPERT RACE

(*Continued from page* 118)

of Puget Sound or British Columbia cities. In these waters there is everywhere the depth of the great glacial period. Hundreds of fathoms is usual on the charts. There is no danger of going aground.

Returning to Seattle, our crew not only had ideal fresh and salt water fishing but saw ducks, deer, bear and the other game which make the region ideal for hunting in season. The North Pacific is not alone a Summer cruising ground. The sheltered waters make cruising safe twelve months in the year. Not only is private ownership of cruisers increasing, but the business of chartering boats to small parties or large is growing with each season.

BOATS AS CONTEST PRIZES

An unexpected volume has been added to the sales of the Horace E. Dodge Boat and Plane Corporation, distributors and dealers during the past two months through the presentation of Dodge runabouts as prizes for various contests held by business, social and charitable organizations in several parts of the country. The giving away of automobiles as awards for contests has been a practice of many years' standing, and, in addition to the sales involved, has usually proved of advertising value to local distributors and dealers.

With the great urge of the American public toward the water and the increased prominence of motor boats in the public mind the offering of Dodge runabouts as prizes has produced gratifying results for committees sponsoring bazaars, field days and other activities of the kind. In some places regatta committees are considering the presentation of Dodge runabouts as major prizes instead of the usual silver trophies.

One of the most recent affairs at which Dodge runabouts were offered as prizes was the annual golf and tennis field day of the Bond Club of New Jersey at the Essex Fells Country Club on May 16.

ADMIRAL SIMS BUYS KNOCKABOUT

Rear Admiral William Sims, U. S. N. who spent the past winter in Boston, ordered an 18-foot Cape Cod knockabout before leaving Boston, and will use it at Newport, Rhode Island. The Baby Knockabout is a roomy one-design sailing craft that carries eight people comfortably. It is cedar planked, is of round bottom construction and is equipped with modified Marconi sail and jib which gives the boat very fair speed. There is no fleet of small one-design boats at Newport, and the Cape Cod Corporation is hoping that Admiral Sim's boat will be the means of starting a fleet of the same type for Newport, as they are particularly well suited for that famous watering place.

Another interesting shipment made by the same concern was an 18-foot Knockabout to Tudo Gardiner, Governor of Maine. Governor Gardiner and his brother Robert of Boston purchased two of these boats last season which they sailed down from Wareham, Mass. to Wiscasset, Maine, a distance of 175 miles. There is a large class of Baby Knockabouts now at Wiscasset.

The Coleman Disposal Company of Boston who use a great many large boats in their engineering contracts, recently bought a 20-foot runabout from the Cape Cod Shipbuilding Corporation for use around Boston Harbor. This is equipped with a large four cylinder four cycle motor with electric starter, which makes very fair speed and carries a heavy load. If this boat proves all that the company desires, they will purchase several others of similar type for use around Boston harbor.

Interesting new catalogs showing and describing the Cape Cod line will be mailed our readers without charge by applying to the Cape Cod Shipbuilding Corporation, 18 Tremont Street, Boston, Mass.

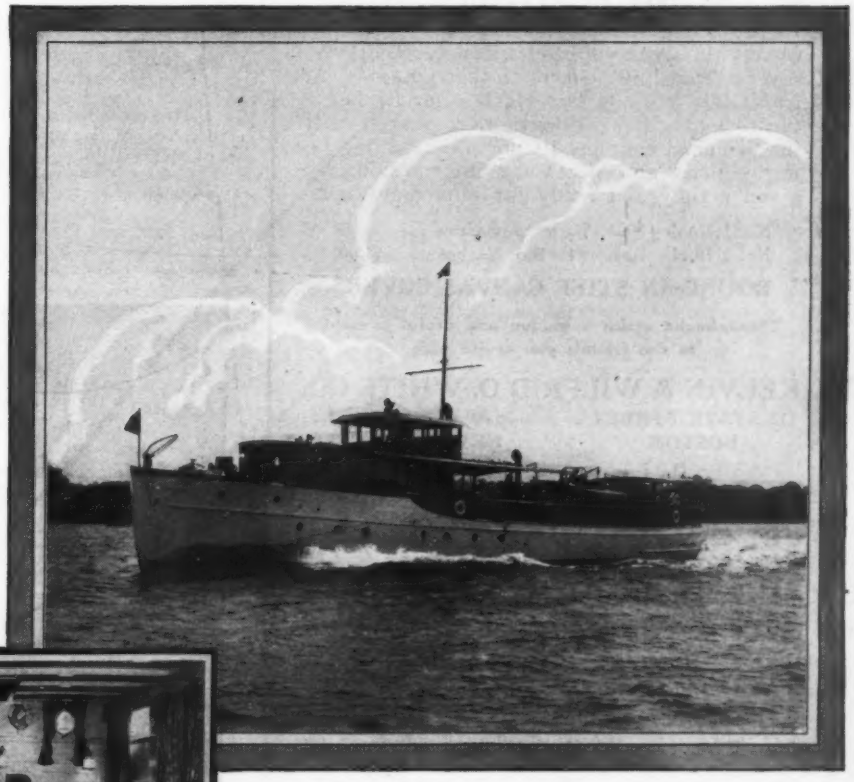
PRESERVING OLD IRONSIDES

The Hyde Windlass Company of Bath, Maine, in reconstructing the original steering wheel of the frigate Constitution (Old Ironsides) used screws of Everdur metal to attach the wood flange covering in the hub of the drum. A new wheel, an exact duplicate of the original, has been installed on the immortal vessel at the Boston Navy Yard, and the original will be placed in the Smithsonian Institute in Washington, D. C.

Everdur metal is an Anaconda copper-rich alloy, which combines the strength of steel and the rustlessness of copper. It is in keeping with the spirit that prompted the organization of a Save-Old-Ironsides committee, that a metal, which will endure for ages, was used to preserve the steering wheel of the historic old frigate, the bulwark of the American Navy in 1812, for the generations to come.

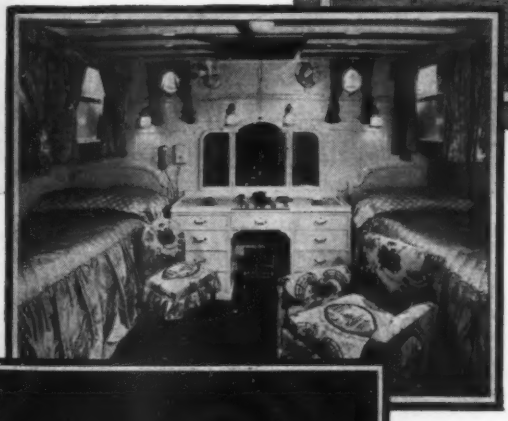
Advertising index will be found on 3rd last page

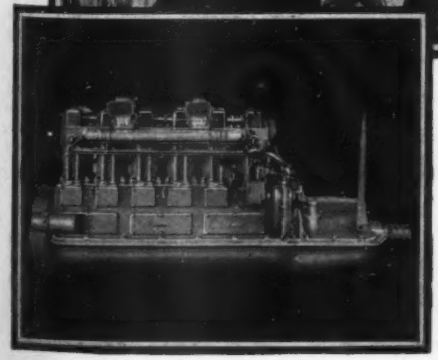
Place your order NOW
for delivery next spring



The Helena, a 95-foot cruiser designed and built for Mr. C. E. F. McCann of New York.

Master Stateroom—*Below*—Model R 300 H. P. Speedway Engine.





The building of a fine boat takes time . . . particularly when it involves the painstaking care and close attention to the smallest detail that are characteristic of Consolidated engineering and workmanship. Hence, in order that you may begin to enjoy your Consolidated Craft with the coming of next Spring, place your order with us now. Let our marine experts help you plan your boat. They will skillfully adapt the individual ideas that you undoubtedly have. And they will design and build a boat for you that will be a source of pride and delight to you for years to come.

* * *

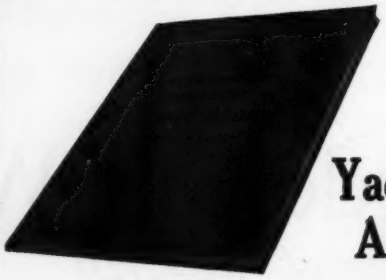
We will be glad to supply tentative specifications without cost or obligation to you. Write to us . . . today . . . for literature or special information regarding any size or type of boat or engine that interests you.

* * *

Thousands of Speedway boats and engines are in yachting service, in Government use and in the Trade.

CONSOLIDATED SHIPBUILDING CORPORATION

MORRIS HEIGHTS NEW YORK



Yachtsmen Ahoy!

SOMETHING NEW

In publishing the Eldridge Books of Harbor Charts this year we have added to each book several "coasting" charts so that you may go from New York to Bar Harbor entirely with these books and without other charts. All the principal courses, distances, buoys, lights, fog signals and necessary information are given plainly and ready for immediate use.

No. 1 Book New York to Boston.....$20.00
No. 2 Book Boston to Bar Harbor.....$15.00

BOUND IN STIFF CANVAS COVERS

These books make a unique and useful present to the friends you cruise with.

KELVIN & WILFRID O. WHITE CO.
112 STATE STREET BOSTON
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SPEED, COMFORT, SAFETY
And Good Old Satisfaction!

Those are the advantages you gain when you install the ST. CLAIR SELF-BAILER. No bilge water annoyance; no drag from bottom suction; no dangerous gas fume accumulation. **The ST. CLAIR SELF-BAILER** overcomes all that and makes your boating an unalloyed pleasure. Works automatically, dependable, highly endorsed. Get more enjoyment out of your boat; write today, stating whether interested for inboard or outboard craft.

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62 Marion St. Seattle, Wash.
(Marine Division) Dept. "B" St. Clair, Mich.
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CLEAN YOUR BOAT . . .
INSIDE AND OUT
WITH THIS
PERFECT PAINT CLEANER

Restores original finish without harming surface. Unsurpassed in Engine Room. Removes grease instantly. Whitens Canvas, Cleans Sails.

1 qt., 75c; 1 gal., $2.00; 5 gal., $7.50
Packed in cans. F.O.B. Phila., Pa.
16 oz. sample mailed for 25c.

SILVER SUDS
Marine Cleanser

Dealers and Distributors Wanted
SILVER SUDS MFG. CO.
829 No. 19th St., Philadelphia, Pa.
Established 1896

YARD AND SHOP

(Continued from page 76)

NEW CHARTS AND COAST PILOTS

The U. S. Coast & Geodetic Survey announce the publication of a new (third) edition of Section C of the Coast Pilot (Sailing Directions) publications; this section covers the Atlantic coast from Sandy Hook to Cape Henry including Delaware and Chesapeake Bays and tributaries and also the inside route from New York to Norfolk; it does not include the inland waterway along the coast of New Jersey which is fully described in a separate publication, viz., the Inside Route Pilot, Coast of New Jersey.

This publication contains detailed descriptions and sailing directions for the waters and harbors in this district as well as general information on such subjects as bridge regulations, fish weirs, aids to navigation, tides, currents, etc. It is based on a special examination by a field party of the Coast and Geodetic Survey during 1929.

The United States Coast and Geodetic Survey also announces the publication of the following new edition of chart:

New edition of Chart No. 284—Hudson River—Coxsackie to Troy, New York, May, 1930. Scale, 1:40,000. Dimensions 20 by 41 inches.

The new edition shows the condition of the improved channel as ascertained by the survey of the United States Engineers in 1929.

The chart and Coast Pilot may be procured or inspected at New York Field Station, U. S. Coast and Geodetic Survey, Room 328, 6 State St., New York.

Maurice Chevalier, in a scene from the "Big Pond," now playing on Broadway, uses a Gar Wood runabout to abduct the heroine

CHEVALIER USES WOOD RUNABOUT

The above is a photograph of Maurice Chevalier in one of the Gar Wood 28-footers, Chrysler marine engine powered. This particular scene is taken from the "Big Pond," which is playing on Broadway at the present time.

When they were looking for a boat to use in this picture, the Paramount Company naturally wanted a boat that would present a fine appearance, with the result that arrangements were made to use this Gar Wood speed boat. Right at this time, Mr. Chevalier is showing off and abducting the handsome girl alongside of him, with his coat thrown over her head and shoulders.

CAMDEN Y. C. IN A. P. B. A.

Another yacht club has been added to the ranks of those listed with the American Power Boat Association. The Camden Yacht Club was elected to membership in the national organization at a recent election.

(Continued on page 124)

Advertising index will be found on 3rd last page

The Acushnet — Owner, Mr. Francis D. Bartow. Architect, Henry J. Gielow, Inc. Builder, George Lawley & Son. A-E-CO Deck Auxiliaries.

A-E-CO Yacht Auxiliaries

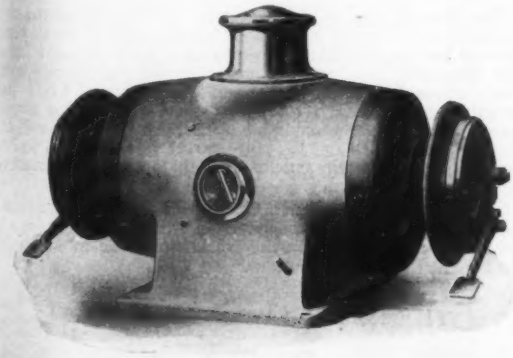
for discriminating owners

FOR the yacht owner who is not satisfied with purely mechanical excellence — who knows that Deck Auxiliaries can be as good-looking as they are reliable and efficient — who wants Auxiliaries distinctive enough to be worthy of a place on his boat — to such men A-E-CO Auxiliaries appeal.

These sturdy assistants do the heavy handling tasks as a matter of course. They are built to serve for years without quibble or complaint. But A-E-CO Auxiliaries give you more than this — they give you the trimness of design, the graceful lines and handsome finish, an added touch of perfection to even the finest boat.

The A-E-CO line includes hand, electric and electro-hydraulic machines . . . windlasses, steerers, hoists, wheels and steering columns, anchors, chain stoppers, etc.

Write for catalogue of the complete line of A-E-CO Yacht Auxiliaries



A-E-CO Electric Windlass, Type "G"
A fully enclosed, self-contained machine that operates by electric switch conveniently placed in front. Requires no holes in the deck to accommodate shafts.

AMERICAN ENGINEERING

AMERICAN ENGINEERING COMPANY, 2419 ARAMINGO AVENUE, PHILADELPHIA

CAPE COD BOATS

DON'T BUY A BOAT

Until you have received information on our boats, as we have several new models.

CAPE COD BABY KNOCKABOUT

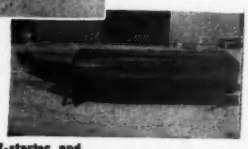
This model is brought out to meet the demands of various yacht clubs and individuals, a number of yacht clubs having adopted this boat as a standard racing class. Some clubs have fleet of 30 boats. All Cape Cod boats are standardized built.

ROWBOATS

10, 12, 14 feet long. Of various models. Strong, well-built and safe.

RUNABOUT, LAUNCHES AND DORIES

New 16' Runabout with Van Blerck Jr., 20' Runabout, Niagara motor, 20' Special Dories safest sea-going boat built.



OUTBOARD MOTORBOATS

New sea-going boat for outboard motor; other models for general utility and high speed use.

16' Speedsem with Van Blerck Jr., self-starter and reverse gear. Complete ready to run. Most seaworthy and fastest little boat built. SPEED 30 Miles. Order early as our production is limited.

$987 F.O.B. Factory

CAPE COD SHIP BUILDING CORPORATION

Builders of Standardized Boats

SHOW ROOM, MAIN OFFICE, AND WORKS, WAREHAM, MASS.

Boston Show Room, Rapp-Huckins Co., 138 Beverly St., Boston, Mass.
Branch Office, 18 Tremont St., Boston, Mass.

"Half-Mile-Ray" We Name The Range, So You May Know!

SEARCHLIGHTS

WHEN a manufacturer names his light by its range, you can rely on it.

"Half-Mile-Ray" has more than piercing power; it has sturdiness, dependability, beauty and ease of control.

Standard equipment on Elco, Chris-Craft, Richardson, Banfield and other famous cruisers.

"One-Mile-Ray" for larger boats; "Quarter-Mile-Ray" for outboards.

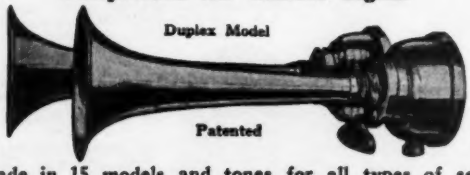
Write for folder on searchlights for every marine purpose. $10 *to* $150. *Also Northeast "Whistletone" Horns and Sireno Sirens,* $7.50 *to* $50.

THE PORTABLE LIGHT COMPANY, Inc.

12 Warren Street
New York City

STROMBOS

Compressed Air Marine Signal



Made in 15 models and tones for all types of sea, river and lake craft. Send for catalog.

J. THOMAS RHAMSTINE*

Successor to American Strombos Co.

504 EAST WOODBRIDGE DETROIT

YARD AND SHOP

(*Continued from page* 122)

TO EXPLORE ECUADOR IN MOTOR BOAT

Sam Love, formerly of the United Press, his wife, Virginia Stuart Love, and a snappy, twenty-seven foot Elco motor cruiser all sailed on June 11 from New York for Guayaquil, Ecuador, on the Grace liner Santa Inez. The cruiser, called La Casa Grace, was firmly lashed on deck and when the Loves reach their destination it will take the water to carry them on an adventurous trip up the Guayas River in an endeavor to discover its source. They expect to be back in the States by next winter. Until comparatively recently Love was a busy journalist, but last fall when he was in Haiti, covering the revolutions there, he decided that he would explore the Guayas River and he was not able to get away from New York until now. He will write a book telling the story of his adventures to be published by the Century Company.

The motor cruiser is fully equipped and of the latest design. It has all the necessary accommodations for the Loves to make it their home during their voyage up the Guayas River and its tributaries from mouth to source. Love has taken along several cameras, a motion picture outfit, a typewriter and plenty of writing paper. His home is at 418 Riverside Drive, New York City.

On May 27 La Casa Grace was christened by Captain N. Newton Lancaster and Mrs. Keith Miller, the British flier, who flew over the motor boat and dropped wreaths upon it.

La Casa Grace on her trial run in New York Harbor prior to being shipped to Ecuador for an exploration cruise

The River Guayas is the largest on the West Coast of South America, and is wide, rapid and fringed with tropical vegetation and the cocoa plantations which have made Ecuador famous. The tributaries flow through many fertile regions which it is nearly impossible to reach by any other route. River traffic comprises numerous craft bringing from the interior districts, ivory nuts, cocoa, pineapples, bananas, watermelons and other tropical fruits which find a ready market in Guayaquil, and taking on their return trip articles of both foreign and Ecuadorean manufacture.

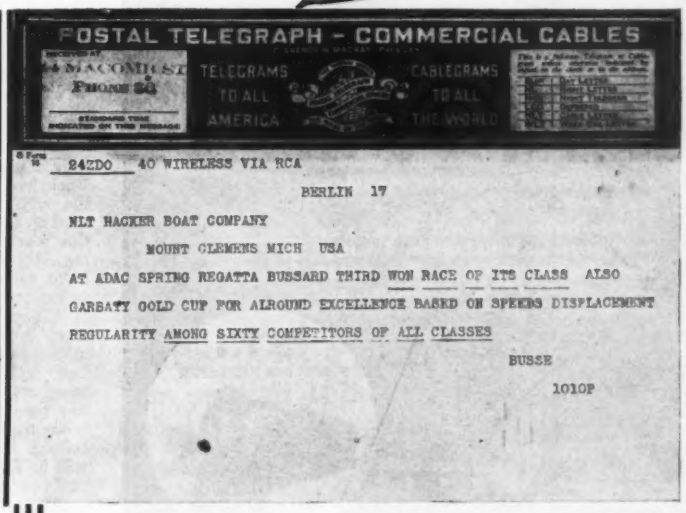
Contrary to popular belief, Ecuador is the chief producer of Panama hats. They are woven from straw derived from a native palm and the finest in the world are made in Montecristi, not far from the port of Manta.

THE ROYAL SWAN BEACH CLUB

At an ideal location, where the Sassafras River joins Chesapeake Bay, approximately 250 acres of land have been set aside for the purpose of providing for the needs of this new club. A beautiful land-locked harbor affords a safe anchorage for many boats and yachts, and all of this will be on the clear waters of Chesapeake Bay. The opening of the sea level canal between Chesapeake and Delaware Bays makes this available to this club when going to or from Florida. The club location is readily accessible by splendid roads from Philadelphia and Baltimore is close by across the Bay. The Royal Swan Club will combine the recreational advantages of many clubs in a single unit, as facilities for every known sport are to be provided. Membership in the club will be limited and by invitation only, and will be maintained in keeping with the traditions of the best clubs.

(*Continued on page* 126)

AMERICA'S *Finest Runabouts*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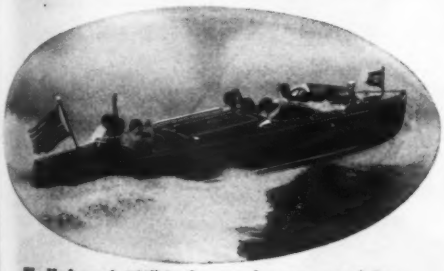
MOUNT CLEMENS MICH USA

AT ADAC SPRING REGATTA BUSSARD THIRD WON RACE OF ITS CLASS ALSO GARBATY GOLD CUP FOR ALROUND EXCELLENCE BASED ON SPEEDS DISPLACEMENT REGULARITY AMONG SIXTY COMPETITORS OF ALL CLASSES

BUSSE

1010P

The 9-passenger 24-foot, 35-mile Hackercraft is beautifully wrought for years of sturdy use . $3150 f.o.b. factory



The Hackercraft "30" is the most elegant source of fine water transportation in stock or custom design . . $5500 f. o. b. factory

Speed records go unchallenged with this fast 26-foot, 10-passenger Kermath powered 45 m.p.h. Hackercraft

CONCEDED THE FASTEST— NOW PROVE THE MOST CONSISTENT . . . . . .

THE consistent performance records of Hackercraft are stirring testimonials to their fine design and stout construction. No other runabouts built today provide so much evidence of speed supremacy and renowned dependability. Amateur sportsmen who have accurately gauged these advantages in Hackercraft ownership find their good judgment repeatedly vindicated on the race courses of America and Europe. Herr Richard M. Busse of Berlin, with his two year old Kermath powered Hackercraft, won event after event staged last year in Germany, France and Italy. His recent radiogram is a glowing citation of Hackercraft peformance in the first event so far held this year in Germany. Palm Beach awarded Wooster Lambert's Hackercraft its second consecutive victory in this mid-winter event. Random claims to fame are one thing . . . but consistent evidence of meritorious performance in the hands of owner-drivers of Hackercraft is a clinching argument for quality design and experienced workmanship. You will always find a Hackercraft ready to repay your faith in a quality product. See your Hackercraft dealer—or write for the Hackercraft catalog today.

HACKER BOAT COMPANY

530 RIVER DRIVE MT. CLEMENS, MICH.

ON DISPLAY—New York City, 5th Avenue at 15th st.; Boston, 1043 Commonwealth Avenue; Chicago, Motor Boat Mart, Navy Pier; Detroit, 7433 East Jefferson Avenue; San Francisco, 102 New Montgomery Street; Los Angeles, 3202 McClintock.

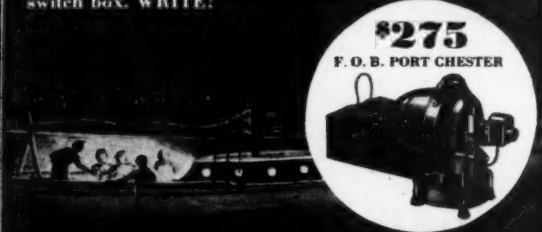
HACKERCRAFT

AMERICA'S FASTEST RUNABOUTS

Electric light for windjammers, too

THE same Homelite electric light plant that's so popular with the motorboat bugs is lighting hundreds of sailboats too. The generator stows in 14" x 21" x 21", weighs but 110 lbs. Will keep your lights burning, perc the coffee, run a fan, hoist a sail or eat your anchor. Small enough for 30-footers, big enough for 70's.

Price includes 32-volt Direct Current generator with built-in, 1½ H. P. Homelite air cooled gasoline engine, 2500 watt hour storage battery, and switch box. WRITE!



HOMELITE

HOMELITE CORPORATION
79 Riverdale Ave., Port Chester, N.Y.

3561

15 HR TO 240 HP — $480.00 TO $2800.00

A Symbol of Dependable PERFORMANCE

Buffalo Marine Engines

Hundreds of owners are proclaiming their dependability, economy and service.

Literature upon request

BUFFALO GASOLENE MOTOR CO.
1286 Niagara Street — Buffalo, N. Y.

Complete Service for Boat Batteries

There is a Willard dealer in your community who will be glad to service your present battery; who can supply on short notice a new battery to meet any boat requirement.

STORAGE BATTERIES
Willard
CLEVELAND·OHIO
LOS ANGELES·CALIF · TORONTO·ONT.

YARD AND SHOP

(*Continued from page* 124)

BURK NAMED ASSISTANT SALES MANAGER

John E. Clifford, general sales manager of Chris Smith & Sons Boat Company, Algonac, Michigan, takes pleasure in announcing the appointment of William A. Burk as his assistant. For some time Mr. Clifford has been looking for a man with qualifications suitable for the carrying on of Chris-Craft work in the field. A man was sought who had a knowledge of boats as well as a previous merchandising training which would enable him to step into the Chris Smith organization and carry on the work under Mr. Clifford.

It is a more or less significant fact that Mr. Burk was at one time a dealer under Mr. Clifford in the Nash organization. Mr. Burk has operated his own automobile dealership and hence has the retail viewpoint which will be so valuable to him in contacting Chris-Craft merchants. Following his eleven years of this work he spent three years with the Johnson and Sea Sled organization. It is therefore felt that Mr. Burk will be ably fitted to assist in sales promotion with the Chris-Craft organization.

"I have been interested in finding an assistant for the past three years who would be qualified to assist our organization in the field," says Mr. Clifford. "Naturally such a man must have wide merchandising experience, wide acquaintanceship and a general knowledge of automobile manufacturers' tactics. It has been my policy in this organization to steadfastly apply to boats those principles which have worked so well in automobile selling. I believe in Mr. Burk, we have found a man who will be fully able to assist at his work. And it is with pleasure that we announce his appointment as assistant general sales manager of Chris Smith & Sons Boat Company."

William A. Burk, now associated with Chris-Craft in the capacity of assistant general sales manager

FRANCE'S NAUTICAL EXHIBITION

Announcement has been made of the Fifth International Nautical Exhibition which will be staged at Paris from October 1-12 on the banks of the Seine—on the quays and on the adjoining promenade. This removal to new quarters has been necessitated because the Grand Palais of the Champs Elysees will be occupied by the Aeronautical Exhibition which will immediately follow the Automobile Exhibition. Plans are afoot to make this exhibition a big demonstration. There will be a large floating exhibit and races and regattas will be organized to add to the display. In addition a building is to be erected on the banks of the Seine where marine motors may be displayed to best advantage in actual demonstrations of their operating qualities.

(*Continued on page* 128)

Advertising index will be found on 3rd last page

Old Man Joe says:

"Because we've been alive to the need, we've been successful in meetin' changes in motor boat conditions."

The rapid strides in engine design in recent years have called insistently for corresponding strides in reverse gear design.

A gear that was "highly efficient" a few years ago would be little better than excess baggage on the lively engine of today.

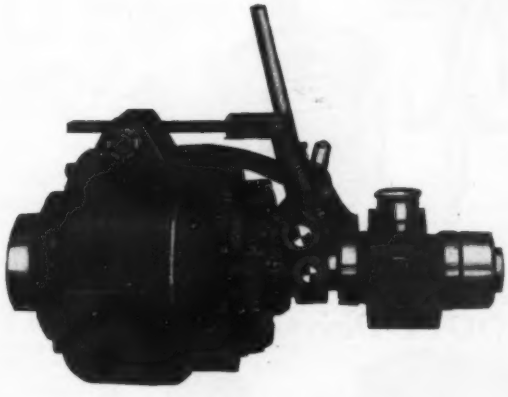
The advent of high compression and greatly increased r.p.m. brought with it a torque entirely too vigorous for the constitution of less efficient gears. Improved balance, closer tolerances, and a generous adoption of the newer and better steels was imperative.

Being constantly alive to these changing conditions is the reason that JOES GEARS are today standard equipment with fifty-three marine engine builders, and the number is constantly increasing.

It is also a reason for the fact that JOES GEARS have been "passengers" on most all of the boats of the winning racing stars ever since motor speed boats were born. So far as reported, no important race was ever lost for failure of Joes Gears.

From the small, high-speed gasoline engine to the big Diesel, every gear requirement is met from the complete line of JOES GEARS.

Our engineers will be glad to help you solve any problem in which gears are a factor. Your inquiry is invited.



THE SNOW & PETRELLI MFG. CO.
19 FOX STREET
NEW HAVEN, CONN.

JOES FAMOUS REVERSE GEARS

REVERSE 80%~88%
of Motor Speed

small boats

JEFFERY'S C QUALITY
LIQUID MARINE GLUE

CLEAN seams thoroughly. Dip plumber's wicking into Jeffery's C Quality Glue. Remove excess glue by drawing wicking between thumb and forefinger. With caulking tool press wicking firmly into seam. Wipe off seam and let set. A particularly good treatment for lap strakes.

There is a Jeffery's Glue for any leak

At all dealers—Send for free booklet, "Marine Glue."

L.W. Ferdinand & Co.
152 Kneeland Street Boston, Mass.

NATIONAL
STREAMLINE
RUNNING
LIGHTS

with outside accessible rebuilding feature.

Poweray Searchlight

Searchlights
Running Lights
Cabin Fixtures
Outboard Specialties

Fig. 831

The National Marine Lamp Company
FORESTVILLE, CONN., U. S. A.

HI-DUTY *Direct Connected* UNIT

Available for use as bilge pump, fuel pump, or as an automatic water pressure system to supply running water on your boat. Built in four sizes and may be had with 12, 32, or 110 volt motor. Very quiet in operation.

Used by leading Boat Builders.

Manufactured by the Makers of the Aqua-Pressor
Write today for literature and prices.

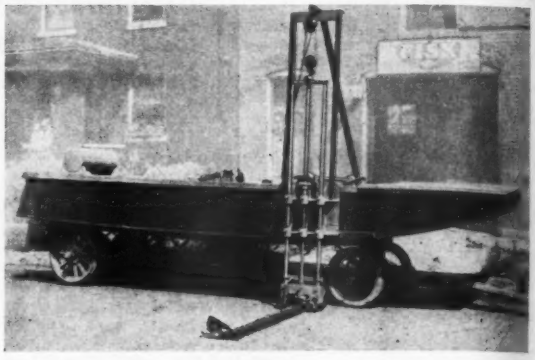
BOWLER, HOLMES & HECKER CO.
250 GREENWICH STREET NEW YORK, N. Y.

YARD AND SHOP

(*Continued from page* 126)

MOWING A MARINE LAWN

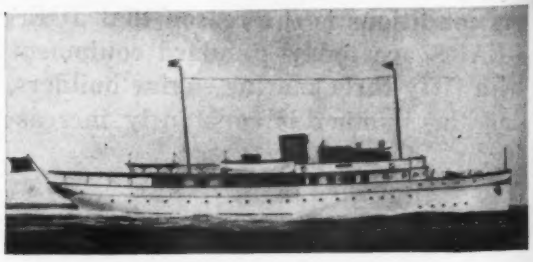
The problem of mowing a heavy growth of pond lillies from a fifty-acre reservoir in Earlington, Kentucky, resulted in the ingenious boat mower shown in the accompanying illustration. The growth of lillies was satisfactorily eradicated with the machine shown and a knotty problem was thus solved.



This Universal-powered seagoing lawn mower was devised to cut a fifty-acre patch of pond lilies

The flat-bottom scow is driven by 35 h.p. Universal motor, which operates the cutting mechanism as well as propels the boat. The mower is geared to the motor as shown. The flywheel of the engine was removed and replaced by a spur gear. Between the cutter bar and the motor was placed a Chevrolet clutch and transmission gear so that the boat could be propelled without the action of the cutter, and also to permit different speeds without having to operate the cutter bar.

The cutter bar is adjustable for different depths of water, as shown, and performs at varying depths from 18 inches to 5 feet below the surface. The middle bar on the carriage is the driving shaft on which the bevel bar slides up and down to drive the shaft by means of a key which fits in a groove. The bottom shaft is connected to an eccentric and connecting rod which gives the necessary oscillating motion. The entire gearing was arranged to drive the cutter a slightly slower speed than the normal speed of such a bar on an ordinary mowing machine. The cutting mechanism is raised and lowered by a differential pulley.



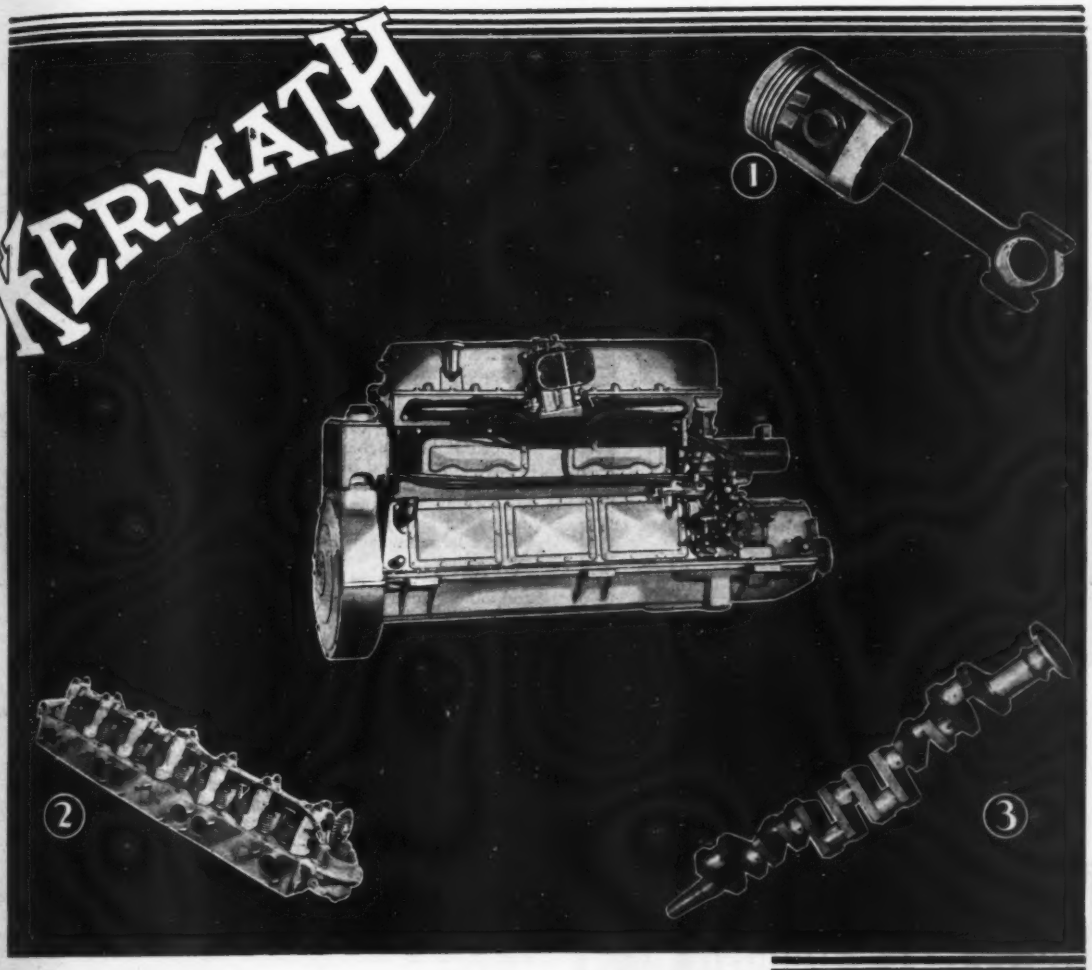
Architect's drawing of the 143-foot Gielow-designed steel yacht to be built by the Bath Iron Works for Charles E. Sorensen of Detroit

WEST COAST DISTRIBUTOR

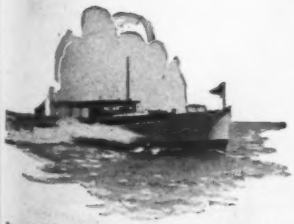
Louis P. Irgang of Newaygo, Michigan, well known in boating circles in Detroit and Chicago, has been appointed Southern California distributor for Gar Wood, Inc. Mr. Irgang's territory will include all of California from San Luis Obispo to the Mexican border and his headquarters have been established in the neighborhood of Los Angeles.

Mr. Irgang has been connected with the Gar Wood organization in various activities since 1920. He was first attracted to the boat business through his interest in marine engines and his outstanding ability as mechanic. His experience covers both manufacturing and sales since he worked in the plant for some time and in 1928 established a reputation for himself as a salesman in the Detroit territory.

(*Continued on page* 130)



HIDDEN VALUES
of a Superlative Line of Sixes



For eight years Kermath has been the standard power in Matthews 38 and 46-foot single and double-cabin cruisers—eighty per cent of the leading boat builders standardize on Kermath power

« »

A KERMATH ALWAYS RUNS

Strip this valve-in-head "six" motor down to the bare fundamentals of design. Build from this point and you will soon realize why the Kermath "225" is more widely adopted by standardized builders of runabouts, cruisers and commuters than the achievements of all other engine builders combined. Faith based on knowledge, facts based on experience, acceptance based on performance becomes conclusive evidence and a clinching reason for such widespread usage. This keen, lithe "six" has a dual Delco special designed ignition system, dual intake and exhaust valves, backfire flame arrester, crankcase ventilation, full pressure feed lubrication, a piston displacement of 678 cubic inches, a big, husky power torque at slow speeds and a range of revolutions from 1600 to 2400 r. p. m., with oil cooler and purifier, down-draft carburetion and mechanical fuel pumps as standard features to put it out in front and keep it there! Other notable features:

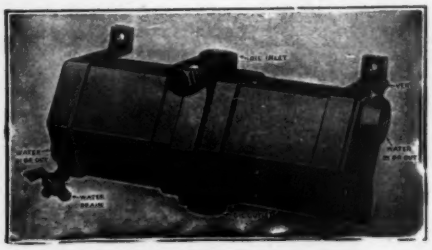
1. PISTONS—Specially designed and constructed (Invar strut type) to control limits of expansion in same ratio to the expansion of super-cooled cylinder walls. Proof against sticking, warping, loss of power. Force feed lubrication to wrist pins. Rods and pistons accurately balanced for smooth power delivery at all engine speeds.

2. CYLINDER HEAD—Quickly removable for valve grinding. Overhead type, designed with four valves per cylinder to effect a 10% increase in power efficiency. Absolutely noiseless and mechanically perfected for positive, long-lived operation.

3. CRANKSHAFT—2½" drop forged, machined all over, seven bearing type statically and dynamically balanced. Fitted with interchangeable main and con rod bearings with extra large bearing surface to distribute loads and insure added smoothness of operation.

Write for catalog. Kermath Manufacturing Company 5879 Commonwealth Ave., Detroit, Mich. 90 King St., W., Toronto, Ont. » » » New York Showrooms—5th Ave. and 15th St.

Increase the efficiency of your engine



ENGINE efficiency is greatly impaired on a long cruise or a hard, fast run by oil that has been thinned by heat.

A Groco Oil cooler provides positive assurance of power and efficient engine performance under any conditions.

GROSS MECHANICAL LABORATORIES
Baltimore Maryland

GROCO

OIL COOLERS

You'll find Groco Oil coolers listed as standard equipment on the finest boats and engines.

HIGH LUSTRE
No "WHITE" Deposit

NO NEED of dull metal around the boat when I. C. U., with very little effort, will give copper, brass and bronze a high lustre with no "white" deposit. Sample free. Dealers write.
The Livingston Company, Dept. T
New Haven, Conn.

I. C. U. METAL POLISH

DE LUXE YACHT LOG

Size 8" x 11"
Price $12.50

For Pleasure Entries.

Keep a record with notes, sketches or photographs, the interesting happenings of cruises, fishing parties or races.

First Of Its Kind

No other log like it. Printed on heavy art paper, bound in real calf. Cover embossed with your club burgee and house flag, in gold leaf and oil colors. An artistic, durable and practical addition to your library. Grows more interesting as records accumulate.

PUBLISHED YEARLY—Be sure and send the name of your boat, yacht club, and design of your house flag in colors, with your order.

Marine Publishing Co., Box 285, Beverly Hills, Cal.

YARD AND SHOP

(*Continued from page* 128)

GREAT SOUTH BAY REGATTA

The Great South Bay Yacht Racing Association, which is composed of the Babylon Yacht Club, the Bay Shore Yacht Club, the Bellport Bay Yacht Club, the Cedarhurst Yacht Club, the Fire Island Yacht Club, Point-o'-Woods Yacht Club, the Sayville Yacht Club, the Shinnecock Yacht Club, the South Shore Yacht Club, the Unqua Corinthian Yacht Club, the West Hampton Yacht Club, and Timber Point Club, has been organized for a great many years, having complete supervision for joint racing of sail boats and power boats on the Great South Bay of Long Island.

This year the association is holding its annual regatta during the entire week of August 4, at Bay Shore. They have set aside Wednesday, August 6, for the motor boat races.

Race Week has always been a gala event on the bay. Most every one who has a boat, propelled either by sail or motor, is out.

Charles V. Snedeker of Babylon Yacht Club, for the second year, has offered a valuable trophy to be competed for by cruisers the course being from the Bay Shore Yacht Club across the bay, through Fire Island Inlet, to and around Fire Island Lightship and back, about 40 to 45 miles, which will not only be a test of the seaworthiness of the boats competing, but also the piloting and navigating ability of the skippers. This race alone will no doubt bring a large number of entries; and it is looked forward to with great interest.

In the morning, before the cruiser race has begun, the juniors and others interested in outboards, will hold sway. It is expected that all the different types of outboards will be entered from all over the bay, and every class will be there. The afternoon has been set aside, after the finish of the cruiser race, for the runabout races, and for entries for all types on the bay the committee has arranged to follow, as far as possible, the rules of the American Power Boat Association. The runabouts will be in six classes:

Class C—up to 22 feet in length, not over 75 h.p.
Class D—up to 24 feet in length, not over 110 h.p.
Class E—up to 26 feet in length, not over 135 h.p.
Class F—up to 26 feet in length, not over 165 h.p.
Class G—up to 28 feet in length, not over 200 h.p.

Also a new GX class of runabouts up to 30 feet in length, with not over 250 h.p.

It is the expectation of the committee that the combination of sailing and motor boating races will be most interesting. During the five days, motor boats will hold the spectators, and on Wednesday the course is expected to be lined with the gleaming sides of the sail boats, all trimmed and bedecked with flags.

Shawnee, M. E. Fontana's 63footer, carries a 4-cylinder 92 hp light weight high speed Buda Diesel

(*Continued on page* 132)

Advertising index will be found on 3rd last page

THEY'RE OFF!
Zoom! A flash!
and these rakish, sparkling craft race through the water toward the coveted Gold Cup.
Whether at the great Red Bank Regatta or any other rendezvous where boating enthusiasts gather, you may be sure to find most of the fine craft fitted with ERICO and KAINER specialties.
To say of a boat, "She is KAINER equipped" implies that the builder through years of "knowing how" has given close attention to every detail and has used ERICO and KAINER fittings to carry quality, value and beauty throughout—insuring owner satisfaction.
Catalog upon request
KAINER & COMPANY
CHICAGO
761-771 MATHER ST.

"New Jersey"
Marine Paints & Varnishes

Copper Paint
Yacht White
Ship & Deck Paint
Spar Varnish
Copper Bronze

For Bottoms "New Jersey" Copper Paint, Red, Brown or Green. For above the waterline "New Jersey" Yacht White will stand washing and scrubbing. "New Jersey" Spar Varnish will not turn white and holds its gloss.

Write for Booklet, "Davy Jones Locker," About Paints and How to Use Them.

NEW JERSEY PAINT WORKS
HARRY LOUDERBOUGH, Inc.
WAYNE AND FREMONT STREETS, JERSEY CITY, N. J., U. S. A.

ALGONAC BOAT HOISTS

If you have a nice boat, why not keep it nice with one of these Hoists? You will be more than pleased with this easily operated and substantial hoist.

$140.00 to $300.00
Fully Guaranteed
Monnier Bros., Inc., Algonac, Mich.

LOBEE CIRCULATING & BILGE PUMP

You can't get a better or more reliable pump than the Lobee because there isn't a better one made. It has been the World's Standard of Pump Quality for 25 years. No other pump has proven so popular in the marine trade. Simple, compact, noiseless and positive. These pumps will outwear the engines to which they are attached.

Gear and Rotary Pumps from ⅛" to 1½" suction and discharge. Different designs for various types of drive and mounting made to order.
Write today for catalog and prices.
Sold by Leading Dealers Everywhere.
Lobee Pump & Machinery Co.
1790 Niagara Street, Buffalo, N. Y., U. S. A.

YARD AND SHOP

(*Continued from page* 130)

NEW SPORT IN AUSTRALIA

In far-away Australia, where the ducks are fur-bearing, and animals are equipped with locker-space, a new thing has been discovered in the waters. It moves with astonishing speed, is perfectly at home in either fresh water or salt, and can be employed as a household pet, or used as a commercial carrier of pay loads. The Australians are openly enthusiastic about it, because even in this land of contradictions and mysteries, nothing like it has ever been seen before. We speak of the coming of the American-built Chris-Craft motorboat to the waters of the Antipodes.

During a recent regatta held in Newcastle, N. S. W., it was desired to enter one of these craft in some of the runabout events, but the only one available was at Sydney, with 68 miles of the storm-tossed coast of New South Wales between it and championship honors. Normally, motorboats of this type and size are not navigated in these waters, but in this case, the owner decided to venture the run—a seemingly dangerous one to him, but a comparatively simple matter to American sportsmen who are familiar with the seaworthy qualities of expertly built V-bottom craft equipped with dependable power plants.

The entire trip to Newcastle was one of continuous battle with cross-currents, tide-rips, and an extremely unpleasant sea that tossed the Chris-Craft about like a cork, to quote one of the passengers. Nevertheless, the 68-mile trip was made in three hours flat, with all passengers dry and safe—an event that caused much comment in all the Australian papers.

Several of these motorboats have been sold in this far-away land, and the sport is being rapidly taken up there. Situated as it is, Australia has an immense stretch of seacoast, but few navigable inland waters, so that motorboats must be extremely safe and dependable to answer the needs of the sportsmen from down under.

Horace E. Dodge, president of the Dodge Boat and Plane Corporation, photographed on his return from a business trip to Europe, prior to his leaving for an inspection of the Newport News plant

BUSINESS IS GOOD

Contrary to the general opinion that there is a depression in business, the yachting industry finds that all signs point to a better and more prosperous season than ever before. Evidences of the increased activity are everywhere apparent and Millard, Brewster & Chambers, New York naval architects, have found it necessary to increase their sales organization in a substantial degree. Messrs. Charles H. Hall, John T. Rowland, H. D. Bayne and S. C. Register, 2nd, have recently been added to the staff of this firm to take care of the noticeable increase in business.

(*Continued on page* 134)

Advertising index will be found on 3rd last page

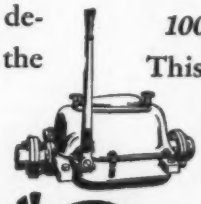
Paragon comes through with a perfect score in the Richardson Cruise!

All the Boats Equipped with Paragon Reverse Gears

A 100% SCORE can't be beaten! The Paragon Reverse Gear was elected for these fine, Gray Marine Engined Cruisers... because the reputation of the engine . . . and of the Richardson Cruisers, as well . . . had to depend upon the reliability of the reverse gear equipment.

Through this last quarter of a century Paragons have held leadership because of Dependability. Paragons are built to stand up under any stress or strain that even emergency gear-shifting might necessitate.

Paragon Reverse Gears have seen heavy duty for 21 years and still "do their stuff" without a falter—well, it just looks as though there never *will* be a replacement.



100% Oil-Tight, Enclosed Models

This same high speed reverse gear that the leading engine manufacturers are building into their engines can be bought in four different sizes in our own oil-tight, water-tight models for any boat you may have. Takes but 15 minutes to drop them into place and connect them.

The "90" Line PARAGON

PARAGON GEAR WORKS

607 Cushman St. Taunton, Mass.

The famous

CARL ZEISS

"BINOCTAR"

Used by masters of ocean liners, naval officers and yachtsmen in every part of the world, and selected as *the official binocular of the U. S. Navy!*

Having extremely high light transmitting capacity, the "Binoctar" is a wonderful night-glass. It has a magnification of 7x, and a wide field of view—128 yds. at a distance of 1000 yds.

See the "Binoctar" and the other Zeiss models at your dealer's. Write for literature.

CARL ZEISS INC., 485 FIFTH AVE., NEW YORK
728 So. Hill Street, Los Angeles

CORSAIR

30 and 36 ft. Open or Closed Bridge and Deck Cruisers

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CORSAIR BOAT COMPANY
1030 Buhl Bldg., Detroit, Mich.

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Since 1866

All Laughlin items of marine hardware are skillfully designed to meet the special strains—the harsh abuse — that come with marine service. Pioneers in design and methods of manufacture for 63 years, the Thomas Laughlin Company has made its trade mark the symbol of honest materials and down-East craftsmanship.

Send for catalog.

THE THOMAS LAUGHLIN CO.
144 Fore Street Portland, Me.

YARD AND SHOP

(*Continued from page* 132)

A NEW EDITION OF AQUINO'S TABLES

The U. S. Naval Institute, at Annapolis, has issued a new edition of Aquino's tables for solving by inspection the spherical triangles commonly used in navigation.

For generations the practice was to work such solutions by logarithms, according to the formulae of spherical trigonometry. But in later years the tendency has been toward tabular methods, from which solutions may be taken with but little computation. Some computation or interpolation is unavoidable, because the elements employed may present an almost infinite variety of combinations; and any table which would give ready made solutions for all, would rival in bulk the great history of China.

In about 1909, Commander Radler de Aquino of the Brazilian navy published tables for finding the altitude and azimuth, as required in St. Hilaire's method, and usable also for almost every solution of the astronomical triangle, and of its counterpart on the earth, the great circle triangle. His table was really a spherical traverse table, and solved spherical triangles much as the ordinary traverse table solves the plane right triangle used in dead reckoning.

His scheme is to let fall a perpendicular, dividing the astronomical triangle into two right angled spherical triangles. The right triangle, of course, has but two variable angles, instead of the usual three; and this so reduces the number of possible combinations that a relatively brief table suffices for all necessary solutions to the nearest degree. With this brief table, he solves by inspection each of the two right triangles, and obtains the computed altitude and azimuth. Some interpolation is necessary, for the table gives results only for the nearest degree of the elements employed. But he furnishes a table of proportional parts which facilitates the interpolation for declination; and avoids interpolation for other elements by using assumed positions near those given by dead reckoning. A plotting to scale on a small chart takes care of the difference between the true elements and the approximate ones used or obtained in working the table.

Aquino's method found favor among many who preferred a compact tabular method and few figures, and who did not mind the task of becoming familiar with their tools. The chief drawback, perhaps, was that the table fulfilled such a variety of purposes, that it was impracticable to give the columns plain English headings. Thus the table was garnished with mysterious looking letters and symbols which were meaningless except to those who had carefully perused the text. And, indeed, the text, while ably written, so abounded in symbols and formulae that the whole method seemed forbidding to the non-mathematical mind. While achieving some popularity, it never enjoyed the favor to which its ingenuity and excellence entitled it.

The new edition is entirely reprinted, and considerably condensed, chiefly by the omission of the plane traverse table, which can be found in any manual. It appears as a thin book of about 150 pages, which will fit an overcoat pocket. The typography is excellent. In addition to Aquino's explanations, there is a first rate chapter by Commander Benjamin Dutton of the Naval Academy, with whom clarity seems to be a habit, outlining the scheme and the method of using the tables, and there are several worked examples by Commander Archer M. R. Allen, the first one accompanied by a step by step explanation of the whole process. These add in our judgment, the very things the previous editions have lacked, and should go a long way toward making the volume useful to those who understand position line navigation, but have no hankering for mathematical formulae and expression.

Besides giving altitude and azimuth, the table may be used for finding the great circle course and distance, and for practically any solution of the astronomical triangle. Its compactness should commend it especially for aero-navigation.

NEW BOAT FOR S. W. BARUCH

The latest addition to Sailing W. Baruch's fleet is Sea King, Jr., a 32-foot Banfield sea skiff sedan. Powered with a 225 h.p. Kermath, this boat attains a speed of 30 to 33 miles per hour. Mr. Baruch is using the sedan to commute between his yacht Sea King and New York City and contemplates using the Banfield as a yacht tender when on extended cruises.

Sea King, Jr., is the third Banfield boat to be purchased by a member of the Baruch family, Bernard Baruch having owned a cruiser for several years and H. N. Baruch has just purchased a Banfield de luxe cruiser which is also powered with a 225 h.p. Kermath.

(*Continued on page* 136)

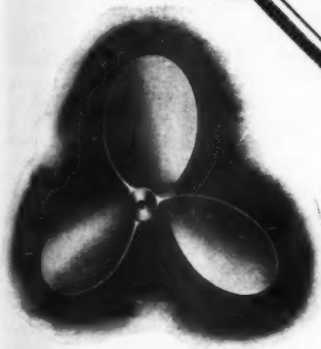
Advertising index will be found on 3rd last page

COLUMBIAN
BRONZE PROPELLERS

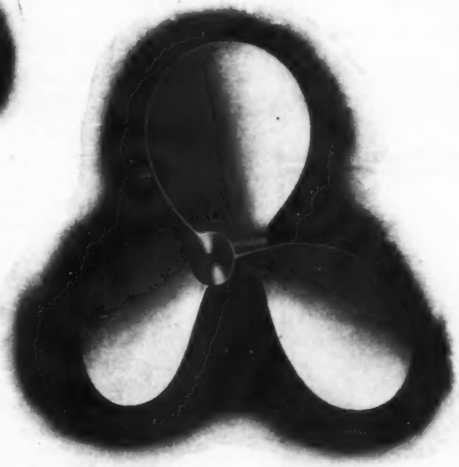
Cap'n Allswell says:

"A check-up on winnin' drivers resembles a roll call o' Columbian users."

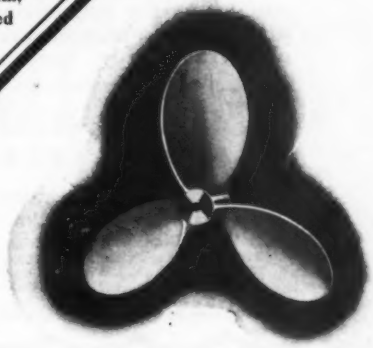
On the two oceans and a thousand lakes and rivers, wherever power-driven craft are found, a check-up on performance would reveal that the majority of winners are propelled by Columbians. The superior performance of Columbian Bronze Propellers on every type of boat is more than a "claim," *it's a matter of record.* Correct design, skilled engineering and a quarter-century's experience are responsible for the dominant position of Columbians in the marine field.



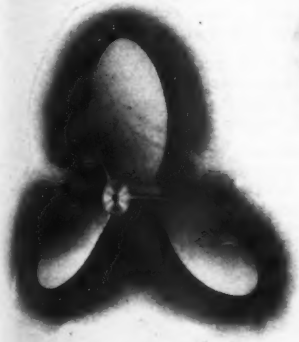
Style F. Figure 80
COLUMBIAN ARCHITECT
A true elliptical type Columbian. Greatest width of blade is 33-1/3% of the diameter. Designed to meet the requirements of Naval Architects, and recommended for use on high-powered boats



Style I. Figure 110
COLUMBIAN AILSA CRAIG PROPELLER
Probably the most popular type of propeller, being well adapted to the majority of boats. With correct selection of diameter and pitch, the AILSA CRAIG has outdistanced all others when used on cruisers, yachts and displacement boats of all kinds.
Greatest blade width 40% of the diameter, making it well suited to limited diameters where an increase in blade area is essential.



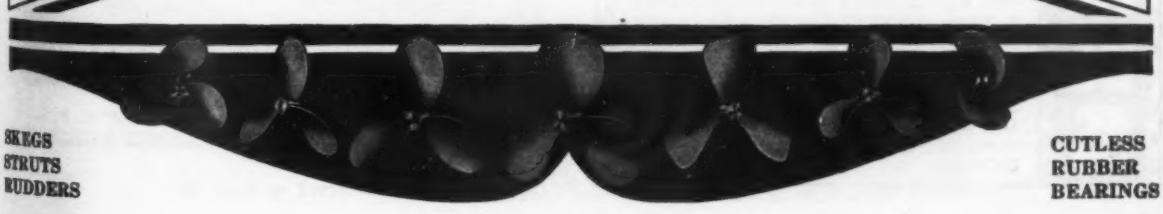
Style G. Figure 90
COLUMBIAN ROCKET
The speed of thousands of boats has been increased by this type of Columbian. It is adaptable to nearly all classes of boats when the correct application is made. Greatest width of blade is 29% of the diameter.



Style E. Figure 40
COLUMBIAN ARROW
Similar in design to Style G. Greatest blade width is 25% of the diameter. Used in connection with small motors and adapted to boats of light construction.

Style SW. Figure 120
COLUMBIAN FULL WEEDLESS
The Columbian three-blade full Weedless propeller is one of our recent developments and is fully covered by patent. Vibration has been entirely eliminated due to the even balance of the three blades.

THE COLUMBIAN BRONZE CORP.
208 North Main Street Freeport, L. I., N. Y.

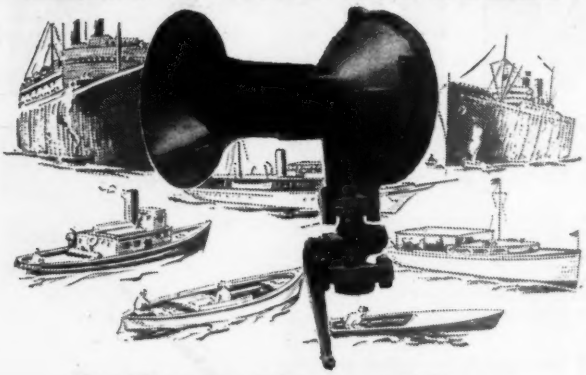


SKEGS
STRUTS
RUDDERS

CUTLESS
RUBBER
BEARINGS

Advertising index will be found on 3rd last page

"HEARD AROUND THE WORLD"



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On waterways wherever you go you'll hear the penetrating efficient tone of the Cunningham... standard equipment for modern craft!

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one-sixth the weight
one-third the space
of former Diesels

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For Storage of
GASOLINE, OIL or WATER
Made to Order

No matter what your tank problem, we are ready to meet your requirements for special shaped tanks in galvanized steel, Monel metal or copper. Our engineering department will be glad to assist you. Also a large supply of standardized tanks in many sizes carried in stock for prompt shipment.

RUDDERS, STACKS, SPECIAL WORK
GALVANIZING

L. O. KOVEN & BROTHER
Incorporated
154 Ogden Avenue Jersey City, N. J.

YARD AND SHOP

(*Continued from page* 134)

THE INTERNATIONAL RULE OF THE ROAD AT SEA

When masthead lights you sight ahead,
Alert your watch must be,
To show oncoming ships your red;
To meet them lawfully.

When slow and steadily you near
A lowered gleam of white,
An overhauling course you steer,
And close must watch this light.

With green to green or red to red,
Your course hold to quite free,
And safe may run your speed ahead,
To clear the lights you see.

Should off to starboard red appear,
And sharpen fine in range,
The right of way is his to steer,
While you perhaps must change.

But when out on your port you see
A steamer showing green,
There's slight cause for anxiety,
If he your lights has seen.

You must, however, sharp watch out;
Let caution strong prevail,
And never crowd the ships about,
For steering gears may fail.

If fog gets thick—rain, snow or sleet—
Your whistle promptly blow,
Quite quickly do the fast ships meet,
As seasoned men all know.

Your engine force keep standing by,
Your speed well in control,
And never let your senses fly,
Or harsh may be the toll.

If danger imminent should loom,
Hard port or starboard turn;
Nor hesitate, when cramped for room,
To throw your screws astern.

From every sailing ship you meet,
Sheer off and keep well clear,
Their course is set by grace and sheet;
Watch well which side you steer.

In seasons when the hard gales blow,
For boats and rafts peer keen,
Keep bright your lookout, high and low;
Heed prompt all signals seen.

And ever while you're steaming out,
Your voy'ges 'cross the sea,
Let "SAFETY FIRST" rule every doubt;
Act always prudently.

—CAPT. ARTHUR G. BURT.
(In Y. M. C. A. Harbor Notes)

Tasman, owned by Albert Spencer, of Auckland, N. Z., is a staunch 45-foot double-cabin model carrying a 200 h.p. Kermath

(*Continued on page* 138)

DeeWite Leads in All Three!

1. *Value Giving*
2. *Price Appeal*
3. *Ease of Purchase*

Thousands of dollars invested in engineering facilities, manufacturing equipment and skilled labor, have enabled Dee Wite to offer consistently greater value than is offered in similarly priced craft. "Most for your boating dollar" is a claim that can be truthfully made in relation to every one of the 12 Dee Wite models.

Until Dee Wite entered the boat building field, true motor boat quality, commanded a price which made ownership prohibitive to the family of average means. Volume production, encouraged by a broader public acceptance of the modern motor boat, has made it possible for Dee Wite to build and sell craft of exceptional quality at prices that would have been out of question several years ago. Price is no longer a hindrance to the enjoyment of the waterways.

A convenient deferred payment plan, similar to that on which the majority of automobiles are sold, makes easy for one to purchase a Dee Wite without financial burden. The long life of a boat of Dee Wite quality guarantees many years of pleasurable ownership and service long after the purchase price has been forgotten.

There is an authorized Dee Wite dealer near you, from whom you can obtain a demonstration, or further information or literature. See him today.

Dee Wite

12 Models
16, 17 and 19-ft.
20 to 40 m. p. h.
$535, $985, $1185 and up
to $2685 f. o. b. Detroit

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By E. F. Knight
The most comprehensive and useful manual on boat-sailing that has ever been written. **With many drawings.....$2.50**

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By Peter Adams
A complete history of famous yachts with instructions how to make them into perfect models, two inches high. For the boating enthusiast who likes to make things. **Illustrated $1.25**

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By B. Heckstall-Smith
The authoritative book for the yachtsman who wants to improve and become better acquainted with his sport. **Illustrated...$7.00**

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The history of fifty noted yachts and the exploits of the amateur seamen that sailed them. **Beautifully illustrated with both photographs and plans.....$5.00**

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The Handiest to Use
Stow Away and Carry
Makes Boating a Pleasure

The Safety Suit can be put on in 29 seconds, slip into it just as you would into a union suit. Put the elastic collar over your head, turn locking levers sealing the suit and you are ready to undergo the most rigorous sea conditions. The Safety Suit is compact and easy to handle. When not in use takes little space.

Comes in various sizes. In ordering give approximate weight and height. Mail orders promptly filled.

Marine Hardware and Yacht Supplies
Send for Our Latest Catalogue

The **DURKEE CO. INC**
29 SOUTH ST., N.Y.C.

THE BEST BOATS *are* C-O-TWO PROTECTED AGAINST FIRE

NOT until you compare every other method of fire prevention can you realize how thoroughly C-O-Two engineers have applied inventive genius to this Fool-Proof System.

C-O-Two the first, original automatic fire extinguishing system employing the use of C-O-Two gas is practically instantaneous in action. Fires in the bilge, engine room or gas storage are immediately extinguished by either remote positive control or the never failing patented automatic action.

It is no wonder that the Best Boats are making C-O-Two their standard equipment. Since its beginning C-O-Two has maintained a leadership fitting to its superior performance and positive protection.

Used by the largest industrial companies and the U. S. Coast Guard.

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A booklet and price list will be sent on request from the factory or nearest representative.

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YARD AND SHOP

(*Continued from page* 136)

MISS ENGLAND II'S WORLD RECORD

Some further light has been shed on the reason for the fatal accident to Sir Henry Segrave's hydroplane Miss England which was mentioned in last month's MoToR BoatinG. The English magazine, *The Motor Boat*, has published the result of an inquiry into the possible causes and this is reproduced as follows:

"It will probably be difficult to say quite definitely what was the cause of the disaster, but the following statement was issued by those connected with the construction of the boat, and was signed by Fred Cooper (designer). A. Wormald, A. R. Rowledge, E. W. Hives and J. E. Ellor (all of Messrs. Rolls-Royce).

'We are agreed that the boat, the engine and transmission gear were all in perfect condition for the first two laps and part of the third, when apparently something happened to cause the disaster.

'From an examination of the boat before it sank there were no signs of any hole in the main hull. The tailshaft, propeller, and the two rudders appeared to be intact and undamaged. The greater portion of the front step on the port side was torn away. The boat floated upside down until disturbed, when air was seen to blow out through the deck openings on the underside.

'Later the missing portion of the step was covered, and this furnished sufficient evidence to indicate the probable cause of the disaster, namely, that a floating object was hit by the rear portion of the step, causing it to be torn off.

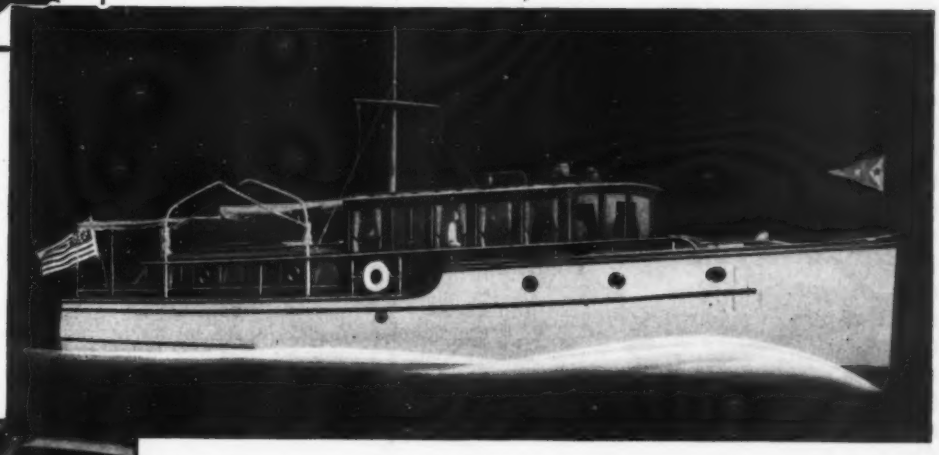
'Subsequently it has been learned that 20 minutes after the disaster a branch of a tree approximately 20 feet long and 3 inches in diameter was picked up 250 yards at the stern of the boat. This could have caused the damage to the step. There is no evidence pointing to any failure of the hull or the machinery.'"

WESTERN SHOWROOM OPENED

An extensive exhibit of standardized boats is to be displayed in the new showroom opened by S. Clyde Kyle in Los Angeles, California, at Wilshire Boulevard and Realtor Street. The display will include cruisers, runabouts and outboards of several different makes, among them the Stephens 43 cruiser, Robinson Seagull commuter, Kyle 30 cruiser, Corsair cruisers, Hacker runabouts and Century and Indian outboards.

Advertising index will be found on 3rd last page

Custom-Built Quality at a Standardized Price



Aft and forward cabins of the Stephens "43" sleep eight. Each cabin has private lavatory.

Stephens "43" Cruiser

NOT only yachtsmen but long experienced boat builders are amazed at the fine quality, superior craftsmanship and unparalleled dollar-for-dollar value given in the Stephens "43." You, too, will be agreeably surprised to learn this forty-three foot, twin-screw, enclosed bridge deck, double cabin cruiser may be purchased for $14,950.

Designed for deep sea cruising, beautifully finished, completely equipped and furnished with every desirable modern convenience for a party of eight, the Stephens "43" leaves nothing lacking.

In construction the Stephens "43" follows the best custom practices with oversize strength throughout. The keel is one-piece Oregon pine; frames are steam bent clear white oak; planking is 1-1/16 inch white cedar, bronze screw fastened. All joiner work and trim are of Burma teak; side decks are of polished teak. Powered with two Scripps 100 h.p. engines, the Stephens "43" has a speed up to 17½ miles per hour.

At top: Enclosed bridge deck. Below: Corner of galley.

Write today for full particulars on the Stephens "43." Immediate delivery can be made subject to prior sale. Also ask for information on the Stephens fifty foot twin-screw cruiser.

We invite your inspection of plans and specifications for twin-screw seventy-five foot express cruiser scheduled for spring delivery.

Also:
Corsair, Robinson Seagull and Kyle "30" Double Cabin Cruisers.

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Help for the Tired Sailor

Dependable, smooth working, efficient ground tackle

NAVY WINDLASS. Mighty fine to be able to brake, let run, heave in, all on the same lever. More efficient than any of its kind we know of. The brake, of the cone type, is positive and absolutely reliable.

Priced at $75.00 and $90.00 for ¼ to ⅜ or ¾ to ½ chain.

NAVY ANCHOR. Takes hold at the first pull—the harder the pull, the firmer it holds. These anchors are ideal for all types of small or medium sized craft. Hot galvanized, proper shackle furnished. Prices 30 lb. $7.75, 50 lb. $11.10, 100 lb. $24.60. Prices for other sizes 5 lbs. to 200 lbs. on application.

YACHTSMAN'S ANCHOR. A superior anchor with such characteristics as non-fouling flukes and rust proof construction. Sharp pointed bills bite into sand, hard bottom, grass, etc., where others simply slide over. Extra broad palms will hold more boat per pound than any other anchor. 25, 35, 50, 75 lb. weights. Price 30 cents a pound.

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159 Varick Street New York City

"SHIP'S SPEAKER"

A distinctly nautical radio loud speaker in polished brass. It combines quality and charm at a moderate price and operates from any set.

Write for descriptive pamphlet

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with detachable back, rod holder and swivel rod socket. It is quickly removable without tools and leaves the deck flush. The wood used is high grade hickory and all metal parts are manganese bronze.

With swivel rod socket to fit either straight or tapered rod butts, or universal socket which fits both types of butts.

$90. $100. $110.

A NECESSITY IN BIG GAME FISHING

made by

H. W. MAJOR

maker of fine salt water fishing tackle

155 Chambers Street

NEW YORK, N. Y.

YARD AND SHOP

(Continued from page 138)

AMERICAN BOATS WIN ABROAD

The real racing season abroad opened at Potsdam, Germany, this year with the German International Motor Boat Meeting, May 30-June 1. The Germans had long been promoters of fast racing craft and while they have not done very much recently the sport is just beginning to return to public favor in Germany. For some time some of the well known German sportsmen have been endeavoring to stage an international motor boat meet which might in some manner serve to arouse public interest again in motor boating. Accordingly, when the International Meeting was decided upon, invitations were sent to every country in the world to participate by sending motor boats to Potsdam. It was interesting to note that owners came with their boats from as far away as Italy and America. Among the entries in the different events were many of the hydroplane type of boats, not so commonly seen in this country. Count Rossi from Vienna came with his far-famed Montelera II, an extraordinary twelve-liter craft powered with a 330 h.p. Isotta Fraschini engine. This queer craft attracted considerable attention on the course before the race and it was during these trials that it won for itself the name of the Three-Step-Sardine-Tin because of its queer flat fish-like construction. It was intended to skip along the top of the water acting something like the wings of an airplane. Sportsmen from all over Europe bundled their boats into freight cars and sent them to this great event. From France came that well known hydroplane Pah-Sih-Fou II, which last year won so many hydroplane events. In addition to the four German boats built especially for the race many American boats were entered. Among these was Arthur Bray, London distributor for Chris-Craft, and his 26-foot, 250 h.p. Chris-Craft. Major H. R. H. White, ardent sportsman and yachtsman, took his 28-foot Chris-Craft to Potsdam with Mr. Bray in an effort to capture some of the prizes.

Arthur Bray at the wheel of his 26-foot 250 h.p. Chris-Craft which performed so successfully at Potsdam, Brussels and London in international competition

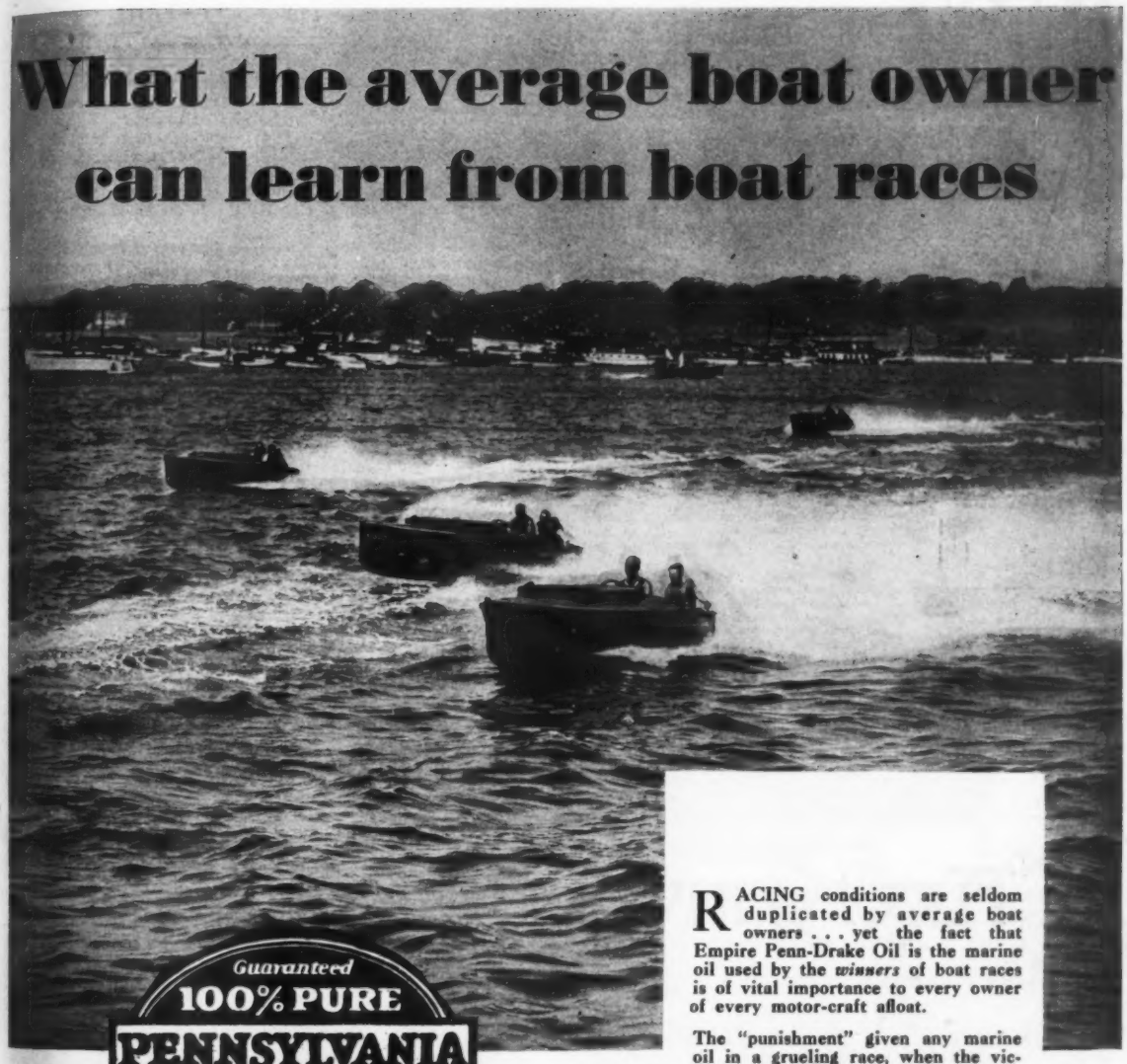
There were races for hydroplanes, displacement boats, unlimited class races, and free-for-alls. In fact every type of fast boat in the world today had several races in which it could participate in an opportunity to win prizes.

No finer tribute to the American made motor boats could be given than the final results which were tallied up after three days of racing. Chris-Craft motor boats had taken six International Trophies for first places. They had won three cups for second places and in addition Chris-Craft had captured the coveted State of Potsdam Trophy and Rupenhorn Club Trophy. These two latter trophies are, of course, two of the most cherished trophies in Europe. It is interesting to notice how displacement boats held up against the hydroplanes in the unrestricted class races. Even the far famed Montelera II fell victim to Arthur Bray's 45-mile-an-hour Chris-Craft. And the famous French contender Pah-Sih-Fou II, was also passed by Arthur Bray and Major White in their Chris-Craft. Bray's average for these races was 43.1 miles an hour at all times and when one considers the fact that the course was an oval one and they were racing many times in rough water, it is indeed remarkable how this high average was maintained. Mr. Bray cabled to this country after the races that during the entire meet it was not necessary to change so much as a spark plug in his motor. Compared to the other foreign contenders who at all times had a battery of mechanics working over them, here is a remarkable tribute to these American-made craft.

(Continued on page 142)

Advertising index will be found on 3rd last page

What the average boat owner can learn from boat races



Guaranteed
100% PURE
PENNSYLVANIA
OIL

REGATTA
Middletown, Conn.
June 8th
Seven Firsts with
EMPIRE PENN-DRAKE OIL
Five Seconds with
EMPIRE PENN-DRAKE OIL

RACING conditions are seldom duplicated by average boat owners . . . yet the fact that Empire Penn-Drake Oil is the marine oil used by the *winners* of boat races is of vital importance to every owner of every motor-craft afloat.

The "punishment" given any marine oil in a grueling race, when the victory is dependent upon the ability of the oil to provide utmost lubrication under extreme heat proves the genuine merit of Empire Penn-Drake Oil.

It is especially refined for marine use. It permits easier starting at low temperature, and assures perfect lubrication even under abnormal conditions. Despite this extra quality which means so much to the life of the motor and to the enjoyment of the owner, the cost of Empire Penn-Drake Oil is less per mile. Here is real economy.

There are three grades to meet the exact needs of every type of craft.

Follow the winners.

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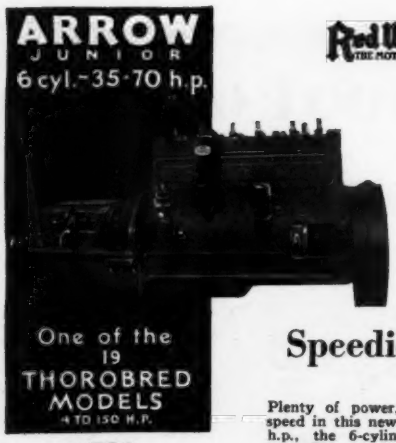
BOSTON WORCESTER MIDDLETOWN

312 Broad Street, PROVIDENCE, R. I.

Refineries: TITUSVILLE and KARNS CITY, PA.



Red Wing Thorobred
THE MOTOR WITH POWER TO SPARE

Red Wing's Speediest "Six"

Plenty of power, pep and safeguarded speed in this new "Arrow Junior" 35-70 h.p., the 6-cylinder motor deluxe for your fast runabout or cruiser of racy lines. Delightfully smooth and with all that rugged strength and stamina which has characterized Red Wing marine motors now for 30 years.

Also available with built-in 2 to 1 reduction gear, making an ideal installation for larger craft of heavy duty type.

Six cylinders, bore 3⅜", stroke 4¾". Piston displacement 255 cubic inches. Speeds to 2500 r.p.m. With electric starter, built-in reverse, full pressure oiling with filter and cooler; and most advanced construction in every detail. The price is sensationally low for so much quality represented.

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ELECTRIC STARTER

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RED WING, MINN., U. S. A.

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A Luxurious Seagoing Twin-Screw 55-Foot Cruiser

FIVE MODELS
55 ft. Twin-Screw Cruiser, $35,000.
50 ft. Twin-Screw Express Cruiser, $35,000.
40 ft. Bridge Deck Double Cabin Cruiser, $10,875.
40 ft. DeLuxe Double Cabin Cruiser, $12,950.
32 ft. Cruisabout, $5,800.
also
11 ft. Mahogany Tenders, $150.00

A CRAFT of extreme elegance in appearance and comfort, a ship in which the safety factor has been developed to the nth degree. Its spoon bottom construction assures smooth sailing and great stability at sea. Accommodations for nine people; hot and cold water, three toilets and bath. Separate crew's quarters. Fleetwing-Peerless, Buda or optional twin-screw power. Delivered in two weeks. Price, $35,000.

FLEETWING YACHT & SHIPBUILDING CORP.
153rd STREET and HUDSON RIVER NEW YORK, N. Y.
Telephone: Billings 7445

YARD AND SHOP

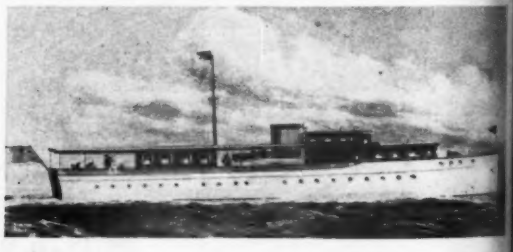
(*Continued from page* 140)

Fresh from their victories at Potsdam, Major White and Arthur Bray next answered the racing call and took their boats across to Brussels, Belgium, where on June 14 and 15 the Belgian International Meeting was to be held. Their fame had spread before them and when they took their boats out on the course during the first day's racing crowds were gathered everywhere to get a glimpse of these remarkable boats. Again at Brussels a great aggregation of racing fans, sportsmen and yachtsmen had assembled to see the finest boats on the continent race.

In this country where motor boat races between displacement boats and hydroplanes are so sharply segregated we cannot compare displacement boats racing against hydroplanes. However, at Brussels, many of the races were unrestricted and it was necessary for any and every kind of craft to enter the running. Ordinarily the displacement boats would not have a chance against the hydroplane due to their construction, which makes them faster although more tricky. And so the first race was run and Arthur Bray and his Chris-Craft came in first with Major White second. Yachtsmen were astounded. They could not believe these displacement boats were purely stock craft and not in any way different from those sold in this country. Then in the scratch race free-for-all the two Chris-Craft again took first and second places. The grand total again represented for Chris-Craft was six firsts and four seconds. To Arthur Bray also went the Commodore's Cup and the Royal Ghent Yacht Club Cup as well as the President's cup for making the fastest time in heats in the Grand Prix de l'Europe.

As if this was not enough for the American built Chris-Craft, Arthur Bray completed his month's racing activity by attending the British International Meeting at London on June 30. Here with the selfsame Chris-Craft he was able to make, in three heats of 20 miles each through the rough water of the Solent, average speeds respectively of 41.67, 41.85, and 42.15 m.p.h. This gave him the fastest time of any contestant at the meeting. For this he was awarded the Atlantis International Gold Trophy, presented annually to that boat making the fastest time in the event.

The fact that an American made boat was able to conquer the best that the Continent of Europe has to offer in speed boats is significant of the excellence of the craft being turned out from our country's boat factories. It is well to remember that English, French and Italian builders had constructed craft especially for these three International events and the best that money and brains could buy was in their boats. So far American-built craft reign supreme. It remains to be seen at the Harmsworth races this Fall who will hold this honor.



Delilah, 104-foot cruising yacht now building at the New York Yacht Launch and Engine Company for Joel S. Coffin of New York. Twin Winton Diesels are to be installed

STEERER FOR STERN DRIVE UNITS

Wilcox, Crittenden & Co., Inc., of Middletown, Conn., announces a new development in steers designed especially to handle modern inboard-outboard stern drive units. The new accessory is called the Crowell Ropeless Steerer and it is claimed there is nothing else quite like it on the market.

Its 55-degree bevelled pinion geared, revolving action (gear ratio two to one) makes steering smooth and effortless. In addition, the new steerer efficiently handles full turning of propeller for reversing operation which some inboard-outboard drives require.

The design also includes the Wilcox-Crittenden exclusive adjustable dash bracket. This feature coupled with improved design of adjustable toe-board bracket readily handles any installation angle problem without additional expense. The Crowell Steerer comes complete with horn button and S. & T. cable. One all brass universal joint attached to the pinion gear shaft is also supplied. The wheel is of modern design, 17 inches in diameter with reinforced rim. Total weight of the steerer 16 pounds. (*Continued on page* 144)

Advertising index will be found on 3rd last page

A.C.F. and other high-grade cruisers all have Sands beautiful plumbing fixtures

They Just Love to Cook in a Galley Equipped with Shining, Chrome Plated

SANDS
PLUMBING FIXTURES

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The polished double-acting Pump brings fresh water from storage tanks in a jiffy —all brass, of course. A chrome plated self-closing faucet will save much precious fresh water if you have a gravity flow or pressure system.

The porcelain enameled sink, with its glistening whiteness, will satisfy the most fastidious demands. The Towel Rack is heavy solid brass, chrome or nickel plated, and the swinging arms are serrated to prevent slipping. A sanitary, non-rattling china soap dish completes an equipment that is as attractive as it is convenient.

And Sands Superior Quality is apparent in every fixture— nothing better is obtainable.

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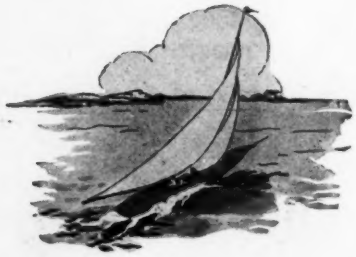
A. B. SANDS & SON CO.
22-24 Vesey Street, New York City

When the Race is On . . .



IT is too late to replace defective gear. Then skippers appreciate their Tiebout Hardware and Fittings, made to withstand more than the usual buffeting of wind and weather.

For whatever replacements which may be required during the season, consult with your boat yard or dealer the latest edition of the Tiebout Catalog. In it you will find hardware and equipment for every type of craft, at lowest prices consistent with Tiebout standards of quality.

W. & J. TIEBOUT
NEW YORK
119 CHAMBERS ST.

YARD AND SHOP

(*Continued from page* 142)

SIR HENRY SEGRAVE

[We print below an editorial from a recent issue of The Motor Boat, published in London, as it so well expresses the feeling not only in England but in the whole world over the loss of this real sportsman.—Editor.]

The death of Sir Henry Segrave at the moment of perhaps his greatest achievement in attaining a higher speed on the water than has ever been reached is a tragedy which will be felt as acutely by those whose interests lie in motor boating as in any of the other numerous fields of activity with which he was concerned. For although Sir Henry's fame, in the minds of most people, lay chiefly in his accomplishments with cars, it is possible that what he has done for motor boating, and certainly for British motor boating, will rank of greater value in the end than his speed records on land.

The design of motorcars, even that with the stupendous speed of the "Golden Arrow," lends itself more or less to exact mathematical calculation. In the design of motor boats of very high speed we are still, to a considerable extent, in the realm of the unknown. There is thus much to be learned in building and running such craft and only by building and running them. No other way is open and as a natural consequence the pioneer who undertakes the work at the same time takes a great risk. It was a risk which Segrave fully realized, not only because of his experience, but becaues the extreme care he took in preparing for all his ventures enabled him to gauge exactly the difficulties and dangers he was likely to encounter.

In the short period of 18 months during which Segrave had taken to motor boating, through his genius for speed he had raised the prestige of British motor boating to a point it had not enjoyed since the war. In 1921 America regained the British International Trophy and until 1929 appeared to be unapproachable in speed. Segrave then took out "Miss England I" and actually, on points, beat the fastest American boat, with double the power, although not exceeding her speed.

Next, Segrave took "Miss England I" to Venice, and apparently without difficulty, defeated America's fastest boat on equal terms, attaining a speed within a fraction of a mile per hour of the world's record, thus demonstrating without question the superiority of the British-built craft. Finally, on Windermere with "Miss England II," he not only surpassed the highest previous world's record with a substantial margin, but for the first time in history travelled at over 100 m.p.h. on the water. He gave up his life in the effort, and the only consolation is that before he died he reached another goal for which he had set out.

What his achievements have meant to this country has yet to be fully realized. For years America had been unassailable on the water. As a result, throughout the whole world, the impression was solidifying that in the production of fast motor boats America was supreme, and inferentially—even though the inference might not be justified—that in the field of motor boating the United Kingdom had fallen behind. Segrave dispelled that impression and showed, as he had previously shown with motorcars, that British products could, and did, lead the way.

That is no small thing, and how much it meant to British prestige and British industry can only be judged by those who have travelled widely and who have learned how greatly a country's industry and prestige depend upon achievements of this nature, news of which receives the widest publicity in all lands. In the eyes of the world the United Kingdom has become the country in which the greatest advancement in the design of motor boats is to be found. And for this Segrave is mainly responsible.

The need for increased knowledge in the science of marine propulsion is great, especially when high speeds are in question. Segrave's work has already proved of considerable value, and has thrown new light on problems which have hitherto remained obscure. In all probability it would have led to discoveries of enormous importance to the designer and manufacturer, which would ultimately have been reflected throughout the whole sphere of motor boat production.

We have spoken solely of Segrave in relation to motor boats, which formed but one—although perhaps, of late, the greatest—of his interests. In his own field he stood completely alone, possessed of a unique combination of characteristics which enabled him to succeed, with a deceptive ease, in what he set out to do. To motor boating his loss is irreparable, and there is apparently none to take his place.

WARREN BACK ON WEST COAST

William T. Warren of the Climax Cleaner Manufacturing Co., Cleveland, Ohio, after passing some time doing special work in the east and middle west, has returned to his Los Angeles home and is again visiting his old customers along the Pacific coast.

(*Continued on page* 146)

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Excellent Cooking *Moderate Prices*

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TWENTY-TWO FEET. DOUBLE COCKPIT. GENUINE SEA SKIFF CONSTRUCTION. 20 M.P.H. WITH 40 TO 50 H.P

Send today for illustrated folder or see the Sportskiff on display at showroom of Henry A. Pohl, Inc., 410 N. E. 13th Street, Miami, Florida. For demonstration see Mr. Alfred Denig, Huntington, New York.

G. T. BACKUS & SON FORT PIERCE, FLORIDA

YARD AND SHOP

(*Continued from page* 144)

VISUAL ECHO SOUNDING

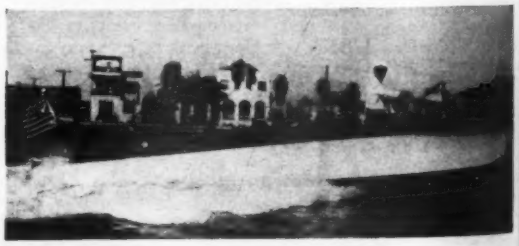
One of the most vital problems of navigation confronting the masters of all sorts of vessels since the beginnings of water craft development has been that of the determination of the depth of water under their ships' keels with a view toward learning their exact positions and keeping a safe depth of water at all times. Groundings are inconvenient and costly, even if not actually hazardous, and the skipper who has modern facilities for rapid and accurate sounding has little to fear from that particular bugbear of navigation. His task is infinitely lightened and he feels an assurance and ease of mind that actually contributes to better navigation.

That modern and scientific instrument of navigation which has revolutionized the old-fashioned system of heaving the lead and has reduced the time required for making a single sounding from many minutes to fractions of a minute is the Fathometer, developed by the Submarine Signal Corporation of Boston, Massachusetts. Consisting of a relatively simple combination of units for the projection of sound waves to the ocean bottom, for catching the returning waves and converting them into electrical impulses which register a visual record of depths on a dial in the chart room or on the bridge of the vessel in which the instrument is installed, the Fathometer places a continual and rapid indication of depths before the navigator's eyes, without the necessity for any retardation of the ship's speed and unhampered by the usual difficulties experienced, especially in bad weather, in hand sounding. First used by the Coast and Geodetic Survey in survey work aboard the government ship Lydonia, the Fathometer has rapidly come into general usage among the better equipped ships and yachts so that there are now over two hundred different installations in ships and yachts of various types.

ELECTRICITY FOR BEGINNERS

Many persons who have but a very hazy conception of what electricity is and the manner in which it works would like to have a simple working knowledge of this more or less mysterious subject. Electricity for Beginners is an elementary work on electricity written in non-technical language by Edward Harper Thomas, author of Forty Elementary Lessons in Electricity. It is a 172-page text book profusely illustrated, published by Norman W. Henley Publishing Company, 2 West 45th Street, New York City.

This volume contains an immense amount of useful information boiled down into short, easily assimilated chapters. The student, either of school age or of more mature mind, who wishes to start the study of electricity in the kindergarten stage of the subject can do no better than obtain his introduction to the fascinating science described so clearly by Mr. Thomas, by careful perusal of his interesting work.



A heavy weather runabout designed by Hacker for G. C. Boynton, Long Beach, California

A ROUGH WATER RUNABOUT

Pictured above is Guy C. Boynton's new 26 by 6-foot 8-inch Hacker-designed runabout running in Alamitos Bay, Long Beach, California. The peculiar conditions obtaining in the place where Mr. Boynton finds it necessary to moor his boat have made it necessary for the designer to work particularly heavy construction and unusually seaworthy lines into the model, as there is no breakwater or protection from the open ocean.

The runabout carries a six cylindered hundred horsepower Kermath marine engine with dual ignition, which provides a comfortable speed of 25 miles an hour when turning a 16 by 18 wheel at 1650 r.p.m. Mr. Boynton states one of the biggest kicks he has ever received from any sport is when he takes this substantial boat out through the surf at a 20-mile clip when it is especially rough outside the harbor.

(*Continued on page* 178)

Model 13

Winners at Twenty to One

WHEN little Model 13 Sea Sled romped home winner in the 36 mile runabout race around Staten Island on Sunday, May 18th, she did a very peculiar thing.

Of course, as winner in an open runabout class she proved her mettle, and lived up to her name, "the matchless unit."

But at the same time and over the same course, a separate class of 21 light racing outboards were competing for a prize and a record which was broken by the winner. And out of that whole fleet of specially designed racing machines, only one, the record breaker, made as good time for 36 miles as Model 13.

That is, if both classes had been racing for the same prize in the same event, the solidly built stock Model 13 runabout, carrying the weight of installed Van Blerck Junior 35 H. P. motor, self starter, gearshift, and rudder, actually outfooted twenty specially designed racers representing practically the outboard field at large.

Which looks like even more of a stunt than her win of first place in the runabout class.

By a joyous coincidence, Model 20 powered with Universal Blue Jacket finished second in the Staten Island race. So it was by long odds a Sea Sled day all around.

Dealers with these two prize winners as headliners have a profitable opportunity of handling a complete line ranging in price all the way from $150.00 up to $8560.00 for stock boats, and with fast express boats and hotel buses, built to special order, which will carry fifty passengers at 40 miles an hour.

Model 20

THE SEA SLED CORPORATION
Plant at West Mystic, Conn.

SEA SLED
SPEED · · WITH COMFORT AND · · SAFETY

HIGHEST FACTOR OF SAFETY
of any craft of the size

Every Motor Boatman and Sailor Needs This Book

THE YACHTSMAN'S ANNUAL GUIDE

The Only Yachting Handbook of Useful Boating Information

No Boat or Nautical Library Complete Without it
Founded 1877
Over 500 Pages

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Valuable Alike for Novice or Expert

Profusely Illustrated

The Reference Book Which Combines the Important Data to Be Found in All Government Publications of Interest to Motor Boatmen and Yachtsmen Into One Volume

PARTIAL LIST OF CONTENTS

*Sixty complete motor boatmen's charts covering the entire Atlantic Coast, Great Lakes, important harbors and rivers
*Tide Tables showing time of high and low waters, range of tides, etc., at more than 1,000 different locations
*List of important lights on Atlantic Coast, their characteristics, fog signals, etc.
*Current tables showing time of slack water, strength of current, time of current changes, etc., at all important points
*Latitude and longitude tables, giving the locations of over 1,000 points, aids to navigation, etc.
*List of ports where numbers of motor boats are assigned
*New York—Florida, motor boat inside route
A complete description of the course for motor boats to follow, where to get supplies, anchor, etc.
*Where to Cruise—
A chapter giving numerous suggestions and hints on cruising, description of the best cruising waters in the East and on the Great Lakes
*Yachting signal code
*List of all yacht clubs
*List of marine engines manufactured
*Trent Canal
*Notes about Government Coast and Geodetic Charts
*Where to buy Government charts
*Cruising to Florida in twenty days
*Racing Summary
*How to form a yacht club
*Duties of yacht club officers and members
Tables of times of high and low tides
*Tables showing time of sunrise and sunset
*Details of motor boat routes, New York to Albany, Albany to Buffalo, Albany to Thousand Islands, Albany to the St. Lawrence River and Montreal, New York to Philadelphia, Buffalo to Detroit, Miami, Fla., to New Orleans, etc., etc.
*Motor Boatmen's Charts of Lake Ontario, Lake Erie, Lake Huron, Lake Michigan, etc.
*Numbering Law—How to obtain numbers for your boat
Index to principal harbors which are described
Tide commutation table
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Outboard MOTOR BOATING

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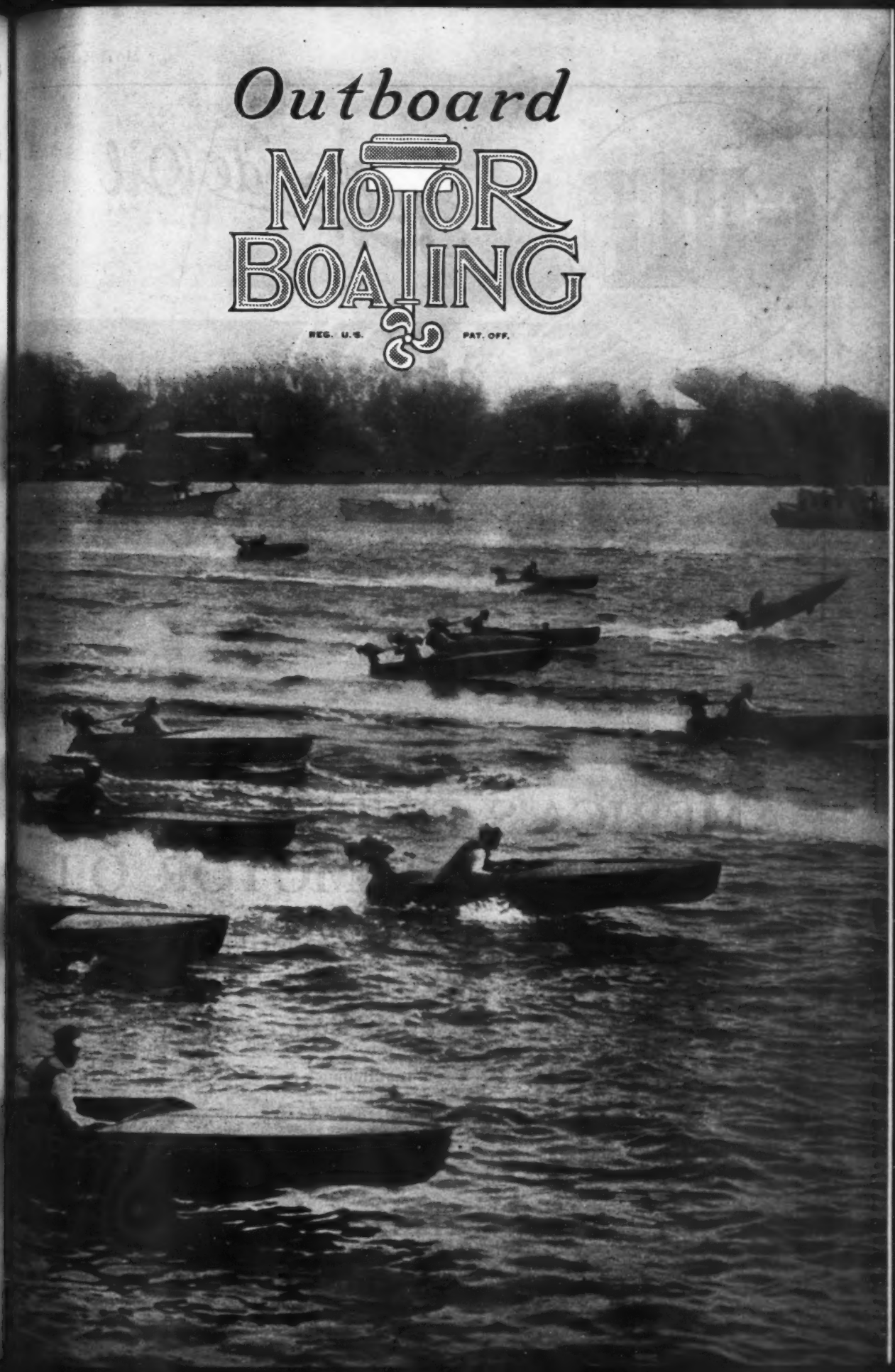

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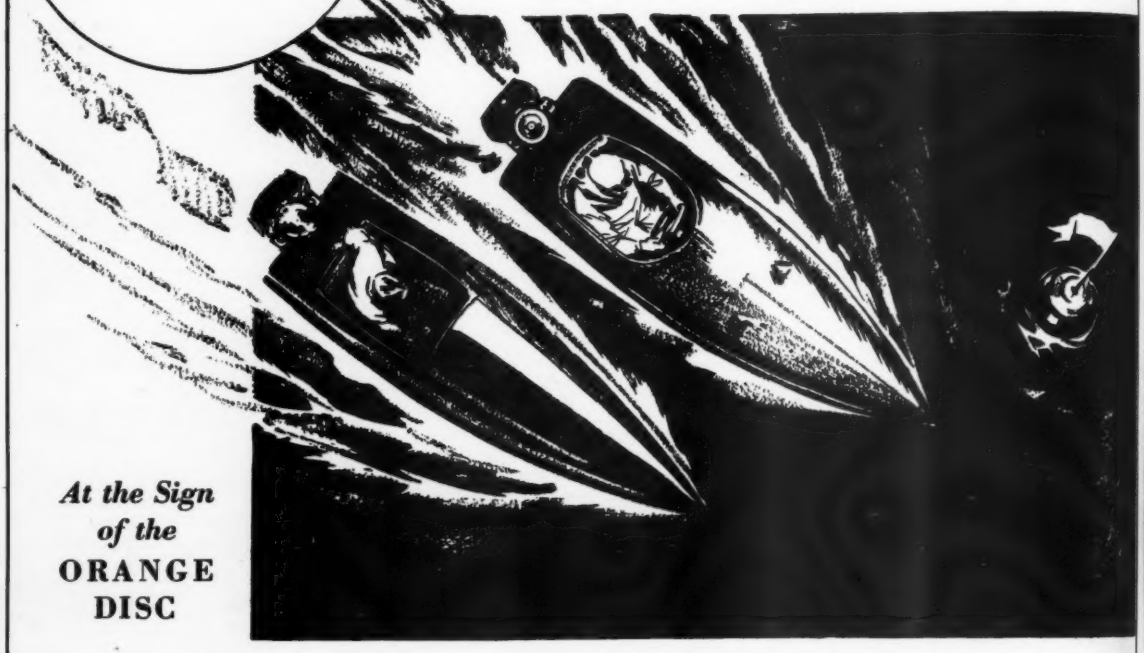

At the Sign of the ORANGE DISC

AMERICA'S FINEST MARINE MOTOR OIL

Measured By All Standards of Comparison, Gulfpride Oils Demonstrate Their Superiority

SECURE
Lowered maintenance and operating costs
Smoother operation
Greater assurance of safety

By insisting on GULFPRIDE OILS for your motor

GULF REFINING COMPANY

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Outboard MOTOR BOATING

Fifty-Seventh St. at Eighth Ave.,
New York, N. Y.

Edited by
CHARLES F. CHAPMAN

AUGUST, 1930

CONTENTS

The Tumbling Outboard Records..... 153
Yachting in the Basque Country.....154-155
Looking Inside the Outboard Engine....156-158
The Hudson Smiles..... 159
Skiing Over the Waves..... 160
Inspection for Record Breaking Engines 161
Records Set at Westerly..... 164
The Month With the Outboards.....166-168
From Singapore to Malacca..... 176

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THIRD ANNUAL GENEVA REGATTA

The Third Annual Finger Lakes Outboard Marathon to be held on Seneca Lake at Geneva, N. Y., on August 23, this year, will be run in conjunction with one of the largest regattas ever staged in the region. The event is to be known as the Geneva on Seneca Lake regatta and will be staged on Friday and Saturday, August 22 and 23, following by one week the Red Bank Gold Cup races.

The regatta is under the auspices of the Seneca Yacht Club of Geneva, N. Y., and races for class B, C, D and a combined E, F and G class for larger motors will be held under the official sanction of the American Power Boat Association. A total of $1,500 in cash and trophies will be awarded to the victors in the class races and the marathon.

The class races will be run over a 2½-mile course raced twice around, two heats for each race, one on Friday and the second on Saturday. The marathon will be staged over a course of 10 laps of 10 miles each or 100 miles in all. It will be open to all classes and all divisions with prizes for each class and division.

The first division I or II contestant to finish will be awarded an expensive trophy given by the City of Geneva, while the first division III or IV boat to finish will win a large cash prize. First, second and third prizes will be given in the class races in each division and class, while cash and trophies will be given the first boat of each class and division to complete the marathon course.

It is expected that Coast Guard boats will be secured to patrol the course with Navy Amphibions and seaplanes assisting. State officials and other prominent citizens of the state will attend the regatta as guests. Arrangements have been perfected to assure drivers every convenience.

Last year's marathon was won by a local driver in record time for the 68-mile lake circuit with Malcom Pope finishing a close second. The course has been changed this year from a down-the-lake-and-back event to a lap race. Sixty-eight entries started last year.

Drivers wishing to enter are urged to write to L. A. Taylor, Geneva Chamber of Commerce for entry blanks and other information at Geneva, N. Y. All races will be run under 1930 N. O. A. and American Power Boat Association rules.

Here's a Reliable Speedometer for Your Boat

One of these instruments installed in a convenient place on your boat will give you at a glance your speed in miles—our log gives trip and total mileage as well. Once you've used one, you'll never be without it, any more than you'd run a car without a speedometer . . . It's a great help in navigating by chart and compass—a life saver in a fog—and a constant check on your engine . . . These fully tested, dependable gauges are rendering valuable service on large and small boats of all types from cruisers to outboards...Passage through the water creates the pressure which is translated accurately into M.P.H. on the dial. There is no connection with motor power, nor towage of apparatus.

NATIONAL MARINE SPEEDOMETER
Outboard Model $18.50 each.
Models A, B, C & D for speeds up to 15, 25, 35, 60 M. P. H. $30.00 each.

NATIONAL LOG
Models H or J for 35 or 60 M. P. H. $150.00 each

Ask your dealer and if he has none on hand, write us direct and give us his name.

THE NATIONAL LOCK WASHER CO.
40 Hermon Street · Newark, New Jersey

Caille Red Heads Set New World's Record

Day after day, telegraphic reports of smashing victories for Caille Red Heads are coming in from every point of the compass!

Startling news! Adam Cappel, who drove a Caille Red Head model 50 at an average speed of 41.906 m.p.h., three miles faster than the former record, set a new world's record for Class "C" at Albany! At the same event, F. A. Sutherland won first place in Class "B" with a Caille Red Head model 40!

At Los Angeles, M. C. Martin wins with his Red Head model 40, against the fastest outboard competition in the world.

John Cornet wins first place in Class "C" at Dallas, while Arthur Jarvis wins first place in Class "B". Les Collins wins first place in Class "B" and Verne Martin wins first place in Class "C" at Wyandotte, Michigan. Collins again won both Class "B" and "C" at Monroe, Michigan. Caille victories everywhere!

Win races or enjoy the utmost comfort and convenience in water motoring with a Caille Red Head! See them at your dealer's now!

. . . and Continue to Win Race after Race . . . Everywhere!

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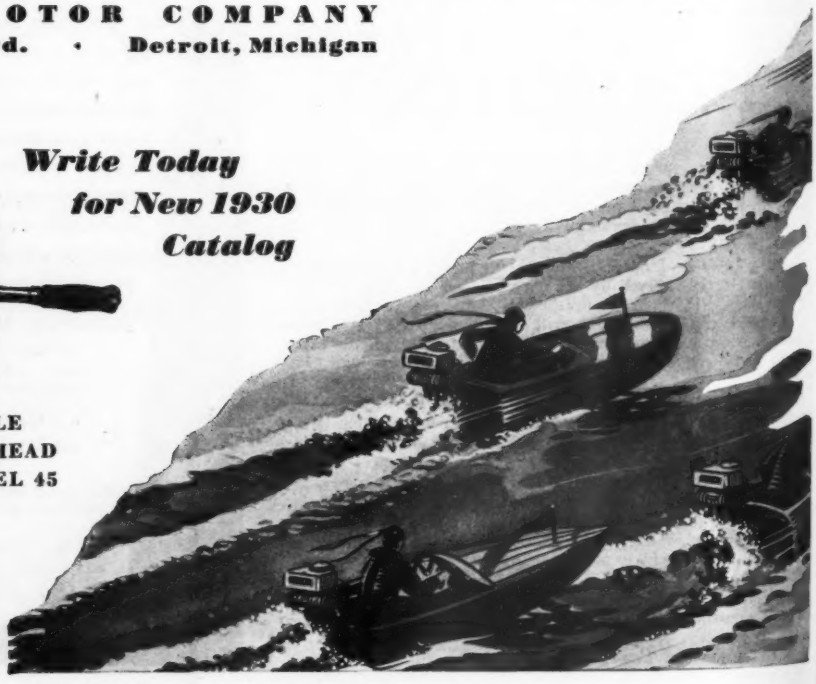


Advertising index will be found on 3rd last page

AUGUST Outboard MOTOR BOATING 1930

THE TUMBLING OUTBOARD RECORDS

Every Regatta Brings a New Batch of Boats and Drivers Who Successfully Attempt to Improve Existing Records

THE Fourth of July holiday with its multiplicity of regattas in all sections of the country resulted in an avalanche of new outboard records which were submitted to the the officials of the Outboard Racing Commission for approval. This flood of new records began with the regatta held at Worcester, Mass., over the Decoration Day holiday and continued without interruption through the Fourth of July. Many drivers who succeeded in establishing a new mark had their pleasure in being among record holders shattered by a new record established elsewhere sometimes on the same day and at other times within a very few days.

Many attempts at the regatta of the Worcester County Motor Boat Club set up records which were subsequently shattered by contestants in events which followed. During the course of the two days of racing, eight new marks were established in the time trials over a measured mile, and several of the five mile records which existed previously were also improved. The small Class A engines which are popular throughout New England established marks of 26.99 in Division I when Bertram Steacie negotiated a five mile course in 11:07. In Division II Norman Kalat was not quite so fast and required 11:37 to do the five miles, giving him a speed of 25.82 m.p.h. Both of these used the little Lockwood engine and hundred pound boats as required under the 1930 rules. In Class B Division I, E. A. Spencer, using a Johnson engine, was able to negotiate five miles in 8:03 with a speed of 37.267 m.p.h.

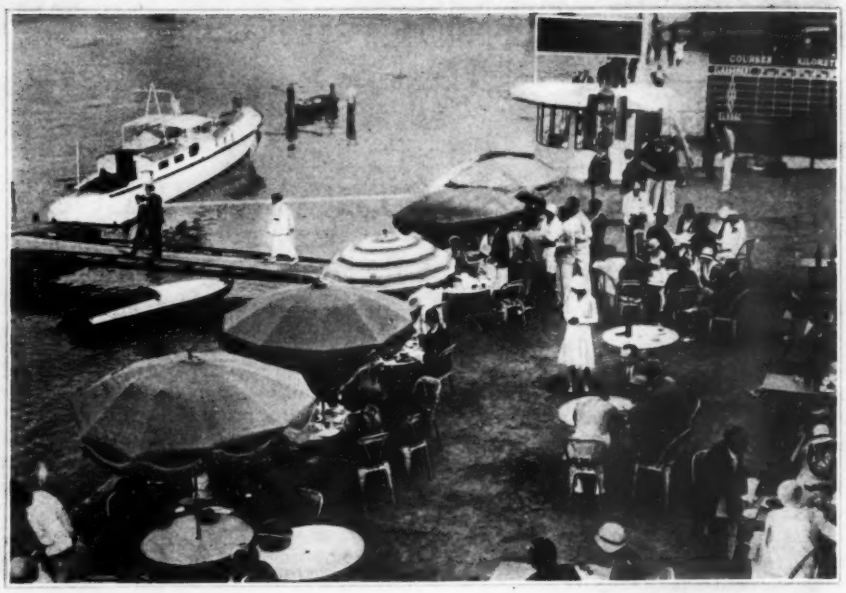
The mile trial attempts were reserved for the days before and after the competitive events and countless drivers made attempts at records. Ross Maddocks, driving an Evinrude Class F in Division III was able to set a mark of 46,75 m.p.h., but not being satisfied with this made another attempt at a later time and raised his own mark to 47.876. E. A. Spencer in Class B I was another of the drivers who set a mark of 38.227 m.p.h. which he later raised to 39.217 m.p.h. Mrs. Mildred Hickey, with a Johnson powered Baby Whale, set a mark of 40.984 m p.h. and, like the others, was able to find a few more revolutions and in a later trial set a mark in Class C Division II which stands at 42.200. Robert Warner with an Evinrude in the same class and division for a time felt that he was a record holder, inasmuch as he had beaten Mrs. Hickey's first attempt with a speed of 40.459. This only stood for a short time, as the higher mark quickly superseded this. Theodore Thompson with a Johnson Class D in Division I set a mark of 42.947 which survived the onslaught of other competitors. Likewise, Miss Hilda Muller's mark of 38.528 remained after the battle was over. Altogether some 36 attempts were made at the records in time trials and eight managed to reach a sufficiently high mark to permit keeping in the record tables.

These marks served to furnish an incentive in later regattas and the B-I, C-I, C-II records have all been superseded by better marks made more recently. At the same time that the Worcester Regatta was setting up some marks, the Stockton Boat Club in California was also doing its best and five new marks were the result of its efforts during this regatta. In Class C Division II, H. G. Ferguson was able to drive his Johnson powered Blue Streak to a record of 44.776. With the same boat and a Class D Johnson engine he was able to increase his speed and set a mark of 46.512 m.p.h. in the larger class. Again in the five mile competition with a Class C engine he was able to cover the distance in 7:23, or a speed of 40.632 m.p.h. In the smaller division Class B-II, C. Holt, driving Firefly with a Johnson engine, was able to raise the mile mark to 41.666 which wipes out the previous record of Flying Cloud made somewhat earlier. Another mark in Class D-I was accomplished by Franklyn Anderson when he made his six runs at a mean of 1:22.4, a speed of 43.689, which betters the record made at Worcester by T. Thompson. In Class E Division II, C. Livingston established a mark of 37.735 which, since it was made with a boat of specified weight under the 1930 rules, will stand as a record despite the fact that it does not quite equal the former mark made without weight restrictions.

The Northwest Outboard Association at its regatta at Sammamish Lake created some competitive records for five and ten miles. These were both in Class C Division II and set by the same boat driven by Roy Craig with a Johnson engine. The five mile mark is 41.135, while the ten mile mark is 41.360, both being very close together and showing the capabilities of the boat and engine.

The end of June saw a class A Division I record for five miles established when B. Reinell drove his little boat at a speed of 28.310, wiping out the earlier record set by B. Steacie at Worcester on Decoration Day.

July Fourth saw numerous regattas both east and west. Westerly, Rhode Island, takes first place with an even dozen new marks set up during its regatta on the holiday. All classes and divisions were represented in this attack on the record marks and begins with Class A Division II in which H. Christ did a mile at 27.501. In Class B-I, E. Spencer accomplished a mile at rate of 39.56 and in B-III, A. Rockwell established a mark of 32.49. *(Continued on page 172)*



Studio Rubertito Biarritz

Lawn of the club-house of the Canot-Club during a race .

YACHTING IN THE BASQUE COUNTRY

Members of Europe's Most Distinguished Families Have Gathered in an Exclusive Circle of Enthusiastic Yachtsmen

By JEAN PATOU

YACHTING is a magnificent sport. The English and the Americans—both marine people—practice it ardently.

In France, the example of a few enthusiastic yachtsmen is beginning to make us understand a little of the joys and beauties of the sport.

There are certain regions in the world that are particularly favorable for yachting:

The Americans have Florida. We French have the Basque coast.

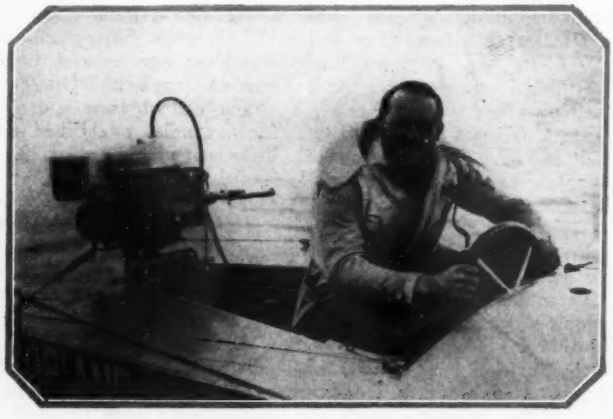
Here we find the river, the Adour, which offers a speedy course of nearly 300 kilometers, and which can be traveled as far up as Dax, or, by detouring by the Gave de Pau, as far as Peyrehorades, a pleasant and interesting journey.

Here, too, we have the ocean—the rough gulf of Gascogne, which calls for strong boats and intrepid yachtsmen.

Tunny fishing, porpoise hunting, and excursions to San Sebastien and Santander furnish occasions for gay trips.

For all these reasons, and for the attraction of its scenery and climate, the Basque country was destined to become the base of operations for French yachting.

The Marquis of Ivanrey, enthusiastic sportsman, and untiring organizer, in founding the Canot-Club of Bayonne, put the final seal on the union of yachting and the Basque country.



The Marquis d'Ivanrey, President of the Canot-Club of Bayonne

Outboard races at the Canot-Club finishing in front of club house

The Jean Patou Challenge Cup for fast runabouts

Assisted by the two vice-presidents of the society—the Marquis of Viana and the writer—the Marquis of Ivanrey has endowed the club with large financial resources and has made of it, both from the sporting and from the social point of view, the foremost of French boating clubs.

Last season several notable sporting events took place at the Canot-Club, particularly the great outboard races which brought together the best pilots in Europe.

The charming club-house is on the Adour, and the smartest and most exclusive social life of all the Basque coast is to be found there.

The members of the Canot-Club are all from distinguished families of France, Spain and England, and it is very difficult to gain an entrée there. The Committee is very severe, the admissions are few and the dues are high. In this way the Marquis of Ivanrey has been able to create among all the members of the club a spirit of comradery and of gaiety of the highest type. He himself brings to the club his endless good humor, his imagination and his great activity.

This year promises to bring even more brilliant events to the Canot-Club. (*Continued on page* 173)

Bar of the Canot-Club at Bayonne

LOOKING INSIDE THE OUTBOARD ENGINE

Vaporizing the Fuel and Getting It Into the Engine Is the Duty of the Carbureter and Modern Devices Accomplish This Most Succesfully

By P. A. TANNER, M.E.

Part VI

THE coal fire in the stove or furnace will not burn unless the draft is open to admit air. About 20 per cent of air is oxygen. The other 80 per cent of air is principally nitrogen which takes no part in combustion. The oxygen unites with hydrogen in the fuel to form water vapor, and with carbon to form carbon dioxide.

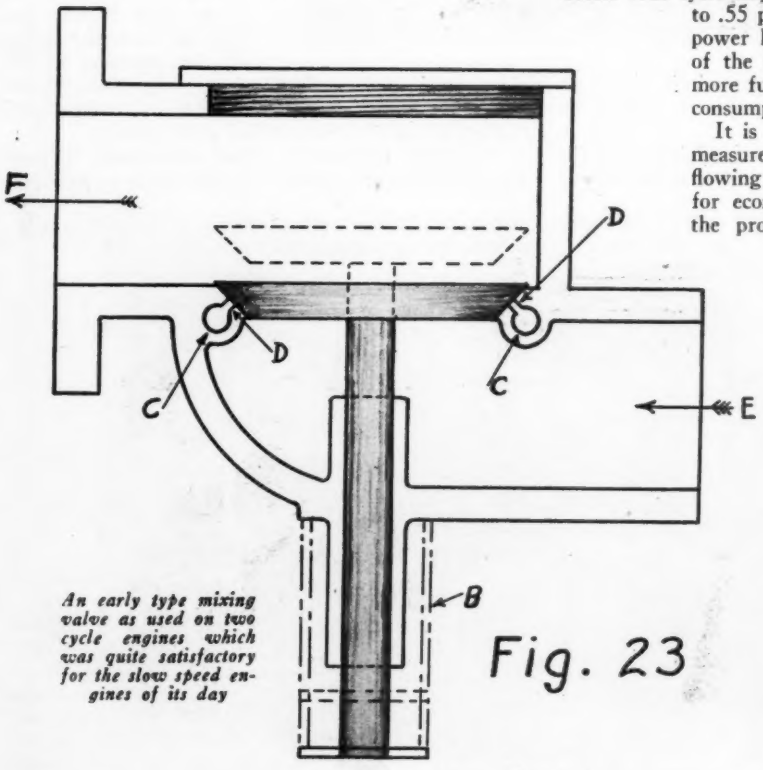
In the gasoline engine, of which the outboard motor is one type, the fuel is a complex compound of hydrogen and carbon in liquid form. It is a concentrated fuel, averaging about 20,000 heat units per pound as compared to 12,000 to 15,000 units in a pound of good soft coal. In order that this liquid may be burned efficiently, it is necessary that it be broken up into fine particles and thoroughly mixed with the oxygen of the air. Each minute particle of hydrogen and of carbon should be in close proximity to the requisite particles of oxygen so that their union may be complete and quick.

Theoretically, about 15 pounds of air is required to completely burn one pound of gasoline. Tests of engines indicate that best efficiency is obtained when there is about 17 pounds of air for each pound of gasoline.

A class B outboard motor of just under 20 cubic inches piston displacement, running at 4,000 revolutions per minute, has a piston displacement—ideal air pumping capacity—of 2,780 cubic feet per hour. The actual pumping efficiency is not known accurately, but assume it to be 80 per cent. Then such a motor actually uses 2,224 cubic feet of air per hour. At 70 degrees temperature this is approximately 167 pounds of air, which should be able to burn 9.85 pounds of gasoline or about 1.64 gallons. Actually, such an engine will burn about 2 gallons of gasoline and oil mixture per hour. Apparently, about .36 gallons is wasted. However, 20 per cent of the fuel mixture is lubricating oil only a part of which, we know, is burned. In the two gallons of mixture, .40 gallons is oil, and that just about checks with the .36 gallons of fuel which the computations above show is wasted. Deducting the oil from the mixture, and assuming that the motor is developing 12 brake horse power, the specific fuel consumption is .80 pounds of gasoline per brake horse power per hour. Compare this to the better four cycle airplane engines which use from .47 to .55 pounds of gasoline per brake horse power hour. The little outboard motor of the two cycle type uses 60 per cent more fuel. At part load the specific fuel consumption is even higher in proportion.

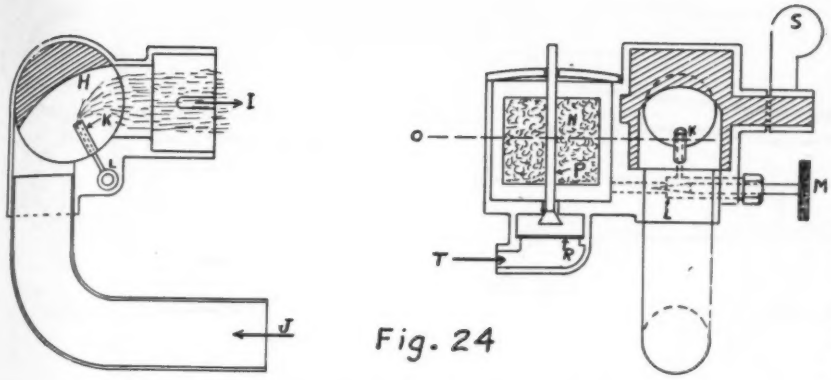
It is the function of the carbureter to measure out the liquid fuel into the air flowing through it in the right proportion for economical combustion; to maintain the proper proportions in the mixture under changing load and speed conditions; and to atomize the liquid and mix it thoroughly with the air.

An automobile carbureter has a much more complicated set of conditions to meet than the outboard motor carbureter. The motor car engine may be called upon to develop all its power at slow speed, as in climbing a steep hill, or to develop full power at very high speeds as on a straight highway, or to give full power at low speed, as in heavy traffic, and low power at high speed, as when going rapidly down grade. The automobile carbureter is therefore a rather complicated instrument since it must meet an infinite va-



An early type mixing valve as used on two cycle engines which was quite satisfactory for the slow speed engines of its day

Fig. 23



A simple form of carbureter with fuel nozzle in the air stream of a barrel type throttle valve

riety of operating conditions. The outboard motor carbureter, on the other hand, serves an engine which is nearly always operating at full load and with speed variations which are infrequent and not so great. The outboard motor carbureter, therefore, is usually simpler.

In the early days when gasoline was more volatile and could actually be vaporized—evaporated into a dry gas—instead of only atomized or sprayed as at present, the simple mixing valve was satisfactory. Figure 23 shows the principle of operation of this type. It is attached to the crank case at F where suction is created, moving the air in the direction shown. Air enters the mixer at E and lifts the poppet valve A against the light pressure of spring B and the weight of the valve. The opening is then an annular one around the valve head, and the air flows at some velocity through it. There is suction at this point of highest velocity, and this lifts the gasoline from the annular space C through the small openings in the valve seat D, D, into the air stream. The small openings and the high velocity of the air break up the gasoline into a spray or fog which is rather thoroughly mixed with the air by the time it reaches the opening F into the crank case.

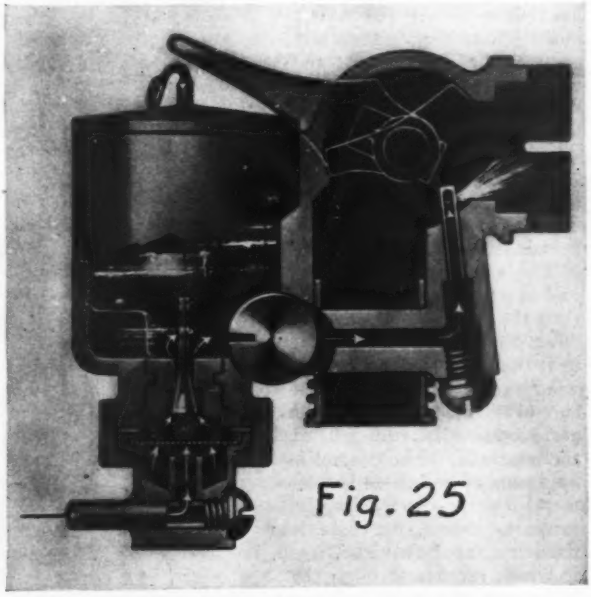
If the sizes of the air passages, and the size, weight, lift, and spring pressure of the valve are all properly designed with relation to the engine served, then this type of mixer is satisfactorily automatic in operation. If a throttle is placed at F, or if the engine is slowed down by means of retarding the spark, the volume of air flowing through the mixer is less and the automatic valve A is not lifted so high nor for so long a period. The valve weight and the spring pressure tend to keep the air velocity past the valve and the seat nearly constant during changes in motor speed so that the induction and the atomization of the fuel does not vary greatly.

As has already been stated, the principal objection to this type of carbureter is that it does not permit of efficient crank case filling particularly at high speeds. Principally for this reason, but also because of wear in the valve and its seat and guide, this type has been almost entirely superseded by other types. Of course in the two port motor some sort of valve is necessary to control air flow to the crank case, and this type of carbureter is used not only to prepare the mixture as described, but also to act as the intake valve to the crank case.

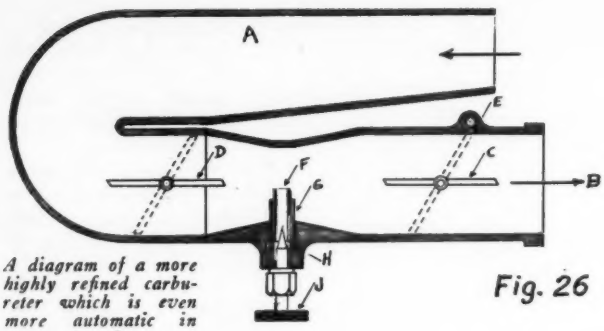
In the three port motor, or the two port with mechanically operated rotary or other valve, it is possible to use a simpler type of carbureter without any constantly moving parts to wear and get out of adjustment.

Figure 24 represents one of this type. The body is usually a thin-walled die casting of aluminum alloy. In the body is a barrel H with a channel cut through it on an angle for air passage. Air enters at J. The intake pipe is usually curved as shown, or may have two right angle bends, to lead air from some warm part of the motor to assist vaporization, and to catch the particles of fuel that are blown back at slow speeds. The fuel nozzle K projects into the air stream, and since the fuel level is maintained as shown by the dotted line O, the suction of the passing air lifts the fuel through a small opening in the end or side of the nozzle when it is caught and broken up by the high velocity. The mixture then enters the intake manifold at I.

The barrel H may be manually rotated. If it is turned toward the right, it restricts the flow of mixture to the engine and reduces the suction at the nozzle. If it is turned toward the left, it restricts the flow of air on the other side of the nozzle but permits full crank case suction at the nozzle. Thus, when the barrel H is turned toward the right, the motor is throttled and slows down. When the barrel is turned toward the left, it chokes the motor, and the high suction draws much larger quantities of fuel from the nozzle than when running under normal speed. The choke position is used only in starting, to provide that much richer mixture of fuel that is necessary for combustion in a cold motor. In this type, the throttle

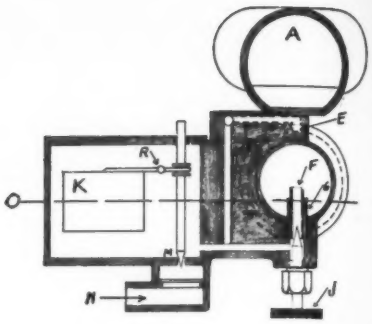


A cross section through a carbureter as used on Johnson engines with the rotatable barrel choke and throttle



A diagram of a more highly refined carbureter which is even more automatic in operation

Fig. 26



and the choke are combined effectively in the one part —the rotatable barrel H.

The flow of fuel from the nozzle into the air stream is governed by the velocity of the ingoing air. If the motor slows down for any reason, less air passes the fuel orifice, less fuel is drawn out. But the flow of fuel to the nozzle is adjusted by means of the needle valve M. The fuel must flow past the small opening L which is partially closed by the point of the needle valve. By adjusting the size of this opening by turning the needle valve one way or the other, the amount of fuel to the nozzle may be adjusted. Adjustment is necessary. On a cold morning the gasoline does not vaporize so readily and more must be used than at midday under a summer sun. But when the needle valve is adjusted for the conditions then prevailing, it should not be necessary to change the adjustment whenever the speed of the motor varies; a well designed carbureter will take care of that automatically. In order to accomplish this automatic control the nozzle must be very carefully located with respect to the passage through the barrel. Moving it up or down within small limits may have little if any effect, but moving it to the right or left changes the character of the air flow past the orifice and thus the amount of gasoline metered out into the air stream.

Figure 25 is a true cross section of one of the Johnson carbureters constructed on the principles above explained.

The supply of fuel is carried in a tank at a higher level than the carbureter and flows down by gravity. Obviously, if it were not controlled, it would fill the bowl U, and run over the top. It would also continually run out of the nozzle K. The control is by means of a cork or hollow metal float N. In its simplest form, as shown, the float is fixed to the float-valve-stem P which extends through the bottom of the bowl and has a tapered portion Q at its lower end larger than the hole through which the stem passes. Fuel from the tank enters the carbureter through the small pipe at T and flows upward through the screen R to a point just below the bottom of the bowl. When the float and its stem is down, the fuel rises in the bowl. The buoyant float rises with it until the weight of the float and its stem are balanced and the taper Q closes the opening into the bowl. The flow is thus stopped.

When the engine is started, fuel is drawn from the nozzle K lowering the level of fuel in the bowl. The float then drops, opens the hole in the bottom of the bowl, fuel flows in, and the fuel rises again sufficiently to lift the float and close the opening. This movement does not take place every time some fuel is taken from the bowl through the nozzle. Movement of the boat and surge of the fuel in the bowl or tank may cause the float valve to open a little and let the level rise slightly above normal; sometimes the level may be a little low; but on the average the float valve opens just wide enough to maintain the level in the bowl and in the nozzle.

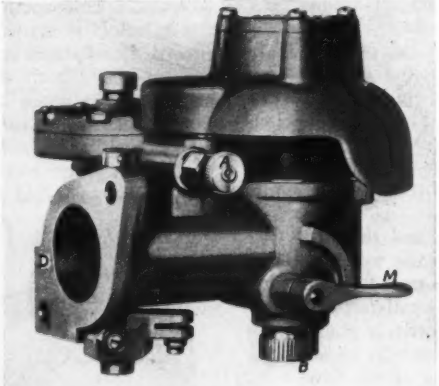
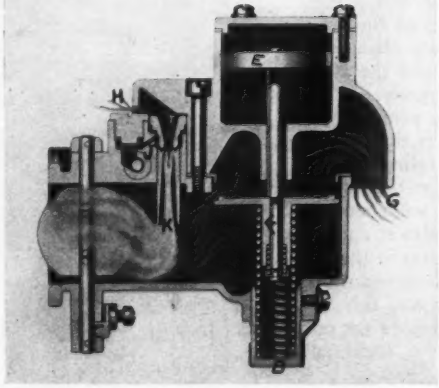


Fig. 27



A new style carbureter called Vacturi which can lift fuel from a low tank without further help

Figure 26 is a diagrammatic section in two views of a more highly refined carbureter — the Tillotson — having three features of construction designed to make the instrument even more automatic in maintaining a correct mixture ratio under all conditions of load and speed. In order to simplify the sketch, many of the details of construction are not shown.

Air enters through the horn A, the opening of which is usually in close proximity to the motor crank case which is warm. The full 180 degrees bend, as before explained, serves as a trap for the blown back particles of fuel and oil at slower speeds. The butterfly valve D is the choke. When this, like a stove damper, is turned crosswise of the passage, the entrance of the air to the carbureter proper is restricted so that there is a high suction on the fuel nozzle and a rapid induction of liquid fuel to the motor for

(*Continued on page* 162)

THE HUDSON SMILES

Two Day Regatta at Albany, New York, Most Successful Ever.

Ideal Weather and Water Conditions Provide a Fast Course

By BRUNO BECKHARD

THERE just isn't another regatta on the circuit like Albany. I can't tell you why, I can't even avoid using the same terms that apply to other events—but they just don't mean the same thing. I can only hope that the manufacturers of a well advertised beverage will give me credit for borrowing their slogan: It had to be good to get where it is.

If you find time to browse around the Albany Yacht Club you may run across the club scrap book, and you will there discover that this club has been holding regattas since the early seventies. You will find further that these events have not been limited to any particular class of boats, but that unlike many other clubs Albany has sponsored nearly every form of competition on the water. No doubt this long record and this varied interest have some bearing on the way this small but active organization takes hold of a regatta.

Still that is only part of the story. Whether you believe in hunches or not the fact remains that through late May and all of June the feeling prevailed that Albany was going to be good. For reasons not now important there was very little advance publicity, and even the entry blanks were late in coming from the printer, yet there was a noticeable trend on the part of the drivers to get ready for Albany, with the result that in spite of perhaps the greatest number of regattas elsewhere on the same dates nearly all the classes had eight to ten starters. And there were two heats for each of 18 groups on the program. And while this does not suggest a really big field it proved to be a very fast field—and in a word, Albany was good.

And still that is not all. I have never seen a regatta anywhere at which the drivers seemed to be getting so much of the same kind of satisfaction and gave in return 100 per cent co-operation. I cannot explain it, I can merely report it, as an experience to be treasured.

The arrangements at Albany have always been good—this year they were even better. A special bridge was built in front of the club house on the first floor level extending to the seawall and this served as the judges' stand. The entire course including the turns was within easy view. Instead of the telephone hook-up formerly used from the barge in midstream, a series of annunciators was used to keep in touch with the drivers' floats as well as to broadcast results and other information to the thousands of spectators. Bombs were used for preliminary signals. Every one of the thirty-six events was started on time to the second, and the results were always announced within a few minutes of the finish. The starting clock worked without a hitch—and for possibly the first time no starting flag was used. Simple and commonplace as these details may sound they combined to lessen the nerve strain on the drivers—and the results were obvious. No boats came out to tear up and down for five or seven minutes before each event, very few boats came out late. For the most part the field showed up about two minutes before time and the starts were all clean. In fact, in spite of real rivalry not a single boat beat the gun.

The river itself was good to us. Lack of heavy rain resulted in unusually clean water—and two more perfect days were never made. Our good friends of the Coast Guard kept the course entirely clear of traffic. I know all this sounds like a dream—but it actually happened.

Yet in spite of these ideal conditions we maintained the Albany tradition of cracking up more than our share of equipment. The answer can only lie in the fact that the boys were trying to the limit, and the speeds made throughout prove such to have been the case.

The problem of taking care of all the various outboard groups was handled by combining the lower divisions in the morning and the higher divisions in the afternoon. This resulted in a rather curious parallel. In Division II C. Mulford Scull took C, D, and F in rapid succession and in the afternoon Francis Brobeil gave the same kind of performance in Division III. Scull shared the morning honors with William Crawford, of intercollegiate fame and Brobeil shared the afternoons with George Pauli. My recollection is that Carl Mason gathered the largest number of prizes.

The 151 class was reduced by a series of accidents that kept a number of the boats from taking part. Elmer Johnson's Sparrow and Chris Ripp's Bayhead took the honors in their respective classes.

At the end of each day's program a few events were staged in executive session—or with the rules suspended—to allow some of the drivers to compete in special match events. Under the same provisions the annual race for the Commodore's Cup was held under the provisions of the Deed of Gift—and while no record of these events was kept the subsequent action of the prize committee makes it reasonable to suppose that Bill Clifford was the winner.

As usual, Commodore Scopes, Ray Delahant, Chairman of the Committee, George Rank, George DuBois, Fred Greseau, Bill Conkey, Doc Rowe and LeRoy Moore and the rest of the crew were on the job every minute, morning, noon and night—and if they left anything undone it wasn't anything that mattered.

Mile trials were scheduled for the sixth but bad weather in the forenoon restricted the number of drivers that stayed over. The old statute mile course was used with telephone connection at each end.

The dinner tendered Saturday night was remarkable for the number of family groups that were present. In fact throughout the regatta there was considerable comment on the number of fathers that seemed to have come with their boys. Comm. Hauptner was there with his two boys, and when they were not racing made himself helpful to the committee. Across from

(*Continued on page* 173)

Racing with riders on Aqua skiis furnishes thrilling sport

SKIING OVER THE WAVES

A New Water Sport Affording All the Thrills of the Winter Time Sport Without the Cold Weather Discomforts

By JACK KERR

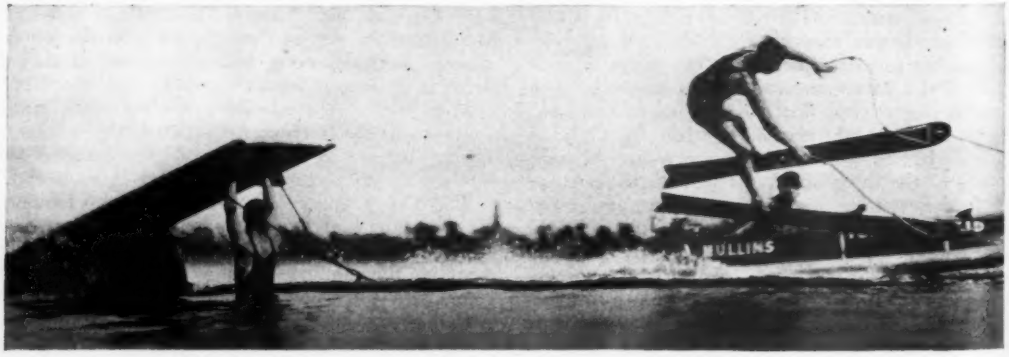
NOW that we discovered that skiing is an all year sport, it seems certain that winter time sport lovers will get all their usual thrills without the frost bitten toes and the heavy clothes. Jumping with Aquaskiis is all to the good too because a whizzing outboard boat will pull you back in position for another flight through the air instead of trudging up a hill.

The outboard boat that pulls the rider need not be extremely powerful as we used Lockwood Chiefs and Speeditwins and even with the B class motors merely stood in position on the skiis in about a foot of water and they would pull you right up to the top when they started, and you could ride for a considerable period of time without getting wet beyond a little spray.

To Aquaskii jump, you use a platform about eight by twelve feet made of dressed boards, with barrels under the middle and a weight at one end to hold that down and incline the platform at an easy angle.

The boat doing the towing comes as close to the side of the platform as it dares and the skii rider swerves over to one side and shoots up and over the jump, sometimes making a splashing good landing some twenty-five feet further on, then the towing boat takes the rider into position for another jump.

High speed is not necessary for this sport and nearly any size outboard that will do fifteen to eighteen miles per hour can be used. We have been towing riders with little Penn Yan Dinghies and with large Mullins Flamingoes and they all work very well.



An unsuccessful landing just after a fine jump over the inclined platform

INSPECTION FOR RECORD BREAKING ENGINES

Outboard Racing Rules Provide a Strict Procedure of Inspection to Insure Full Compliance with Stock Motor Equipment

IN Rule XX of the Official Outboard Racing Rules a Stock Motor is defined and the specifications of stock models filed by the manufacturers with each member of the National Outboard Racing Commission outlined.

In Rule XXII, section 16, it is REQUIRED that any motor making an American Record shall be inspected to make sure that it is a stock motor.

The Outboard Motor Manufacturers Trade Association is charged with appointing a person or committee (where requested at least 15 days in advance of the regatta) to make this inspection. Because of the numerous events in which American Records are at stake, it is impossible to provide that satisfactory inspectors be present in all cases. In that case, if a motor does set a new American Record, it is the duty of the regatta committee and the referee to hold the motor, seal it, and ask for inspection, which will be provided as promptly as possible. It is important that the regatta management procure and hold a motor immediately following the race in which it sets a record.

Whenever possible, inspectors who are familiar with motor construction and skilled in making close measurements will be appointed. In many cases an inspection committee, each member representing in a measure at least, one of each of the motor factories, will be made available; in others, some neutral machine shop or mechanic. Unless the Inspectors are qualified and willing to dis-assemble and re-assemble the motors themselves, then skilled mechanics should be provided for the purpose. The mechanics should, of course, have adequate facilities and tools.

It is the duty of the inspectors to carefully handle the motors to prevent damage or loss to the owner, and to see that the motors are re-assembled (if requested by the owner, many of them prefer to do the assembling themselves) to working condition as before dis-assembly. No provision has been made for inspectors' compensation as in most cases they are men interested in some way in outboard motors and gladly give the little time necessary. If expense is to be incurred in the inspection, the manufacturers will handle each individual case on its merits, if advised in advance.

The Inspectors should become thoroughly familiar with Rule XX, Definition of a Stock Motor.

The Inspectors must be provided with the manufacturers' latest specifications, which are loaned to the local Referee by one of the National Racing Commissioners.

Each motor claiming an American Record must be checked over as per the attached Inspectors' Report—each item is to be entered as inspected.

Six copies are to be signed by all inspectors. Attach one copy to each of the five Referees' Reports (as per Rule XXV) to go to the Racing Commissioners. Send one copy to H. Biersach, Secretary Outboard Motor Manufacturers Trade Association, c/o Outboard Motors Corporation, 1897 27th Street, Milwaukee, Wisconsin.

No motor need be inspected unless the required affidavit has been signed and filed prior to the race (unless the inspection is made as a result of a protest) as provided in Rule XVII.

Only those motors which are believed to have set a new American Record are to be inspected (unless in case of protest).

In case the Inspectors are doubtful as to what may be permitted without destroying the stock-status of a motor, then the Inspectors' report to the Racing Commissioners should be so complete that they can then interpret the rules and decide whether the motor is stock under the rules.

Inspectors are to report their findings whatever they may be and are not to pass on the stock-status of the motor—that is the duty of the Racing Commissioner with the full report of the Inspectors for guidance.

INSPECTION PROCEDURE

1. Tools: Steel scale divided to 1/32 inch. Glass measurer divided in cubic centimeters—Sensitive balances or scales—wrenches, screwdrivers, calipers, micrometers, etc. A rack or horse to hold the motors, and boxes for parts, are very desirable.

2. Remove one cylinder of motor (one pair, if a 4-cylinder motor). (*Continued on page* 174)

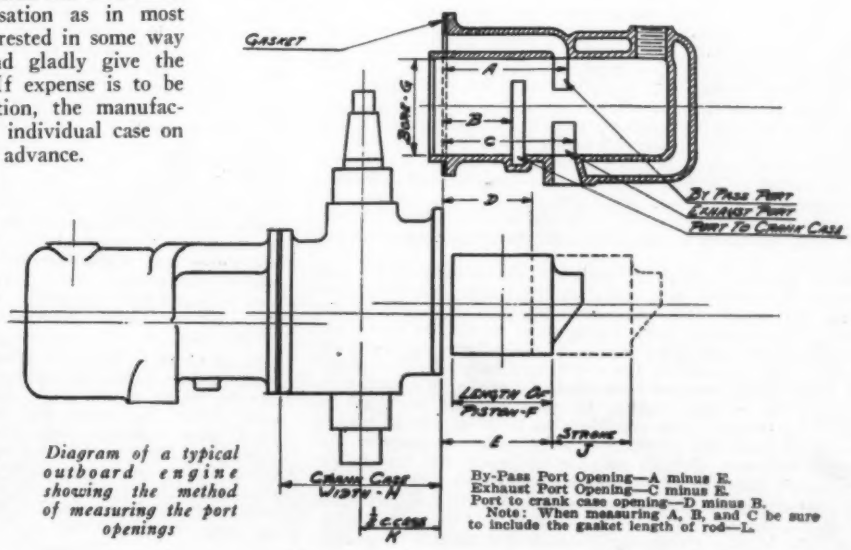


Diagram of a typical outboard engine showing the method of measuring the port openings

By-Pass Port Opening—A minus E.
Exhaust Port Opening—C minus E.
Port to crank case opening—D minus B.
Note: When measuring A, B, and C be sure to include the gasket length of rod—L.

LOOKING INSIDE THE OUTBOARD ENGINE

(*Continued from page* 158)

starting cold. In normal operation this valve is turned edgewise to the stream of air and offers little resistance to it.

At the point where the nozzle is inserted, the tube of the carbureter is restricted somewhat in diameter. This tapered restriction is known as a Venturi and its purpose is to increase the velocity of the air at the nozzle.

The nozzle or jet F projects into the air stream. Fuel is drawn from its end and atomized by the rapidly moving current of air. Surrounding the nozzle is another tube slightly larger, also connected to the gasoline supply, and communicating with the inside of the nozzle through some very small holes. When the motor is idle, the gasoline rises in the nozzle to a point where it flows out into the small annular space formed by this outside tube. This very small amount of fuel is drawn from this space, G, known as the accelerating well, when the motor is started. It, in other words, constitutes a small reservoir of extra fuel to be drawn upon when starting or when the throttle is suddenly opened to permit greater speed. Also provision is made for the entrance of some air through the nozzle F to help atomization.

The rate of flow of fuel to the nozzle is controlled by the needle valve J which adjusts the size of the passage H through which the fuel flows from the bowl to the nozzle.

The butterfly valve C is the throttle. When it is turned to restrict the flow of mixture from the carbureter to the crank case, the motor slows down, but under full load operation it is edgewise to the current of mixture and offers little resistance to free flow. The mixture enters the intake manifold at B.

When the throttle valve C is in the closed or nearly closed position, the engine running slowly, and the velocity of the air past the main nozzle F is low, there would be insufficient fuel drawn into the air stream for steady operation. A by-pass jet or auxiliary nozzle is therefore provided in the upper wall of the mixture passage at E just on the suction side of the throttle valve. As the edge of the valve approaches it, the air current is deflected past this nozzle and at the same time the suction to the right of the throttle valve increases. Fuel is then drawn from this nozzle and enters the air stream, supplementing that from the main nozzle.

The by-pass or auxiliary nozzle is designed to supply fuel as needed at slow speeds. As the throttle is gradually opened, the amount of fuel from the main nozzle F increases and the amount from the auxiliary nozzle E decreases. When the throttle is, say, half open, all the fuel is being supplied by F. The change over from one to the other is so gradual and the two are so closely correlated that no lag or halt in the operation of the engine may be noted.

The passages P, P, leading from the carbureter bowl to the by-pass jet E are designed to permit entrance of a small amount of air which mixes with the fuel prior to its discharge at E and provides better atomization.

In the Tillotson carbureter a hollow metal float K is used instead of a cork. It is attached to a short lever with a stationary fulcrum at R which engages the float valve stem L. The float valve L controls the flow of fuel to the carbureter bowl at M. The advantage of the metal float is obvious; cork will sometimes lose its coat of varnish, absorb moisture or fuel, and get too heavy to float with sufficient buoyancy. By placing the fulcrum R to the right of the center of the lever, the pressure of the float due to its buoyancy may be multiplied so that the valve is very positively operated and held firmly to its seat.

The butterfly valves D and C are almost frictionless so that remote control by means of bowden-wires may be easily affected. When greatest power and speed are desired, as in racing, the air Horn A may be removed. This carbureter is then ideal for high-speed operation as the air flows straight through without turn.

When the larger type of outboard motor is more or less permanently installed in a runabout, it is convenient to provide a large fuel supply tank and remove the smaller tank from the motor. This requires some arrangement to lift the fuel from the tank to the carbureter bowl. A mechanical fuel pump attached to and operated by the motor may be used. Frequently, now that electric current is available from the storage battery supplying the electric starter, an electric pump such as the Auto-Pulse is used. It is possible, also, to draw a small amount of mixture from the crank case when under compression and thus put pressure, through suitable piping, on the fuel in the large supply tank; or to use a hand-operated air-pressure pump.

A carbureter which itself automatically lifts the fuel from the tank is now available and in use by one motor manufacturer. The Vacturi Carbureter is shown in Figure 27. The main supply of air enters at G and is drawn down past the flat air-valve F which is thus opened against the pressure of the spring beneath it. Attached to the same stem is the disk or piston E which works snugly in a closed cylinder and acts as a dash-pot. This dash-pot works on the same principle as the common door check which will not permit quick and violent movement of the door in either direction. The piston E is a damper on the quick movement of the valve F so that it will not follow each individual suction impulse of the motor, but still is free to open to a position to admit sufficient air for the average needs of the motor at any time.

Air also enters the carbureter at H and is drawn downward through the small nozzle K. In passing through the venturi portion of this small nozzle, this air stream picks up and atomizes the fuel from the small passages shown at J. At the opening of the nozzle K into the main air stream, the very rich fuel and air mixture is further mixed with the main air, and thus the whole is drawn into the motor at D past the throttle valve which is shown in the open position.

The continuous vacuum or suction which is made to exist at all times within this carbureter by the restriction imposed by the air-valve F is used to actuate means not clearly shown in the photograph to lift the fuel from the supply tank to the opening surrounding the small nozzle K, at J. No pump, vacuum tank, or other outside device is necessary.

The choke for starting is operated by the lever M which tends to lift and hold the valve F close to its seat, thus creating a high suction in the carbureter so that a very rich mixture is provided through the nozzle K. The adjustment of gasoline flow is by the needle valve A in the usual way. There is also an adjustment at B which may be used to increase or decrease the spring load upward on the valve F to control the air. The throttle, of the ordinary butterfly valve type, is actuated by the lever C.

It is claimed that this carbureter provides such superior atomization that the power of the engine is actually increased while the fuel consumption is lowered, but from the theoretical standpoint it is difficult to see how crank case filling can be so complete with the air restriction caused by the valve F, as compared to the straight-tube type of carbureter providing straight and unrestricted air flow.

Particularly in the Opposed Twin motor of the third port type, the intake manifolding is an important part of the fuel system. In smaller motors the passages from the carbureter to the third port openings are frequently cast into the crank case and cylinders. In larger motors a separate intake manifold is used. In either case, for best operation of the motor it is important that the air flow through the manifold be direct and unrestricted and that the size of the passages be such as to maintain velocities which will carry along the heavier particles of fuel and oil. A manifold which is too large will cause hard starting and perhaps uneven running at throttled speeds; and one which is too small will restrict the flow of mixture and cut down the power at higher speeds.

In one case a barrel type carbureter was devised as a part of the manifold itself, the barrel valve being so arranged that at slow speeds most of the charge was directed through but one arm of the manifold to one of the third ports only. This served to maintain high velocities in the manifold at low engine speeds, an advantage made apparent by easy starting and regular running under less than half load.

There were two engines of almost identical size and similar design, A and B: Engine A developed about 15 per cent more power than B and ran evenly at partial loads and started without difficulty. A careful engineering check showed that the intake manifold of B was about 50 per cent larger than that of A. It would be assumed that B would have the better crank case filling and would therefore operate at higher speeds and deliver more power. The reverse was true; engine B was the least powerful and was getting a bad reputation for hard starting. A new manifold with smaller passages largely corrected the difficulty.

In an effort to get more charge into the crank case at high speeds, the auxiliary air vent has been tried. Openings were cut into the intake manifold just outside the opening into the third port. After the motor was started and operating at some speed, these openings were uncovered permitting air to flow directly into the motor along with the charge from the carbureter. Better crank case filling and more power at high speeds can be obtained in this way, as part of the restriction of the carbureter and the manifold is avoided. But from the all-around operating standpoint this method is hardly practical. If the

(*Continued on page* 170)

Start of the race, Chapman leading

Chapman repeats 'round Manhattan victory with Mobiloil

Chapman in "Big Ben" after the race.

For the second time Harold Chapman captures the coveted Pulitzer prize for first place in the annual 'Round Manhattan Outboard Marathon.

And again Gargoyle Mobiloil shares in the honors!

Speeding over the choppy 30-mile circuit, Chapman outdistanced the field of thirty-five competitors in face of a series of trying mishaps. His steering wheel broke in the dash through East River. This was but the first of many accidents which would have put a less dauntless driver out of the race.

But not Chapman!

Other difficulties aplenty, but his powerful, Mobiloil-lubricated Johnson 32 never failed in its rhythmic beat!

Mobiloil rides with the winners wherever motor boats are raced. More heat resistance at high speeds, better engine protection, and less carbon and ring-gumming account for its holding 34 of the 40 official American Outboard records.

Ask here for Gargoyle Mobiloil

LOOK FOR THIS SIGN

VACUUM OIL COMPANY

Makers of high-quality lubricants for all types of machinery

Mobiloil

RECORDS SET AT WESTERLY

Prominent Drivers Compete in Two-Day Regatta on the Pawcatuck River, R. I., and Raise Eight Speed Marks

TWENTY thousand people, hailing from points all over New England and New York State, lined the banks of the Pawcatuck River, separating Rhode Island and Connecticut, on July 4 and 5, to witness an attack upon world records by some 200 outboard motorboat drivers of national repute. The occasion was the third annual regatta of the Westerly, R. I., Yacht Club, which this year was in the form of a triangular meet between the power boat associations of Long Island, Rhode Island, and Connecticut, and was sanctioned by the American Power Boat Association. This throng, one of the largest ever to witness a sporting event in that section, was treated with three world's record breaking performances, all in the one-mile straight-away events, and five class record accomplishments over a five-mile course.

Westerly is second only to Newport as the East's most popular summer resort. Newport this year has the international yacht races and Westerly, with its natural surroundings, rivals her as a racing center for New England. At a point near her yacht club the Pawcatuck is extremely wide and deep. With high slopes on either side it makes an excellent place for racing, particularly outboarding, and the new records established there came as no surprise to those acquainted with the course. The river starts up state and empties into Little Narragansett Bay.

Walter Kopke of Essex, Connecticut, was the outstanding performer of the first day's program of the two days' events. In the morning he broke the world's record for the one-mile straight-away event in Class C, Division 1, with an average speed of 43.426 miles per hour for six runs over the mile course. The old record of 38.528 miles per hour, established at Worcester, Mass., on May 29, this year, by Miss Hilda Mueller of Bay City, Mich., was raised by nearly five miles per hour and is likely to stand for some time, in the opinion of Edward J. Grady of Boston, the American Power Boat Association's official timer. In the afternoon competitive events he won the five-mile race for boats in Class C, Divisions 1 and 2, placing himself at the top of the list for most individual points earned and also giving the Connecticut Powerboat Association a lead that was not overcome during the duration of the meet. Rhode Island finished second and Long Island third. He drove a Harrison and Wythe boat with a Johnson 24 motor.

Immediately following Kopke's sensational run Elliott Spencer of Westbrook, Conn., broke his own world's mark of 39.217 miles per hour by maintaining an average speed of 39.560 miles per hour in the event for boats in Class B, Division 1. His former record was established at the Worcester, Mass., Yacht Club's meet last Memorial Day.

The third record to fall before the onslaught was the Class A, Division II, record of 27.135 miles per hour, held by Norman Kalet of Worcester. The new record was established by Herman Christ of West Barrington, Rhode Island. He drove his Cute Craft boat, equipped with a lockwood Ace motor, over the course at the rate of 27.501 miles per hour.

Weather conditions for the record breaking achievements were ideal. Kopke and Spencer established their records on the morning of July 4 and Christ set his the following morning. The water was smooth and there was a gentle breeze and a running tide. The latter two, however, were neither beneficial nor detrimental, as three runs were made with the tide and wind and three against them. Kopke's driving was most consistent, his runs with and against the tide all being within four-fifths of a second. The runs of Spencer and Christ varied as much as a minute. Spencer, by the way, used the same type of boat and motor as his teammate, Kopke, used.

The competitive events were run off during the afternoons. A cross wind, which kicked up a choppy sea, doomed any possibility of records being broken in the first day's events. On the second afternoon, however, ideal weather conditions again came and it was then that the five class records were broken.

The outstanding performance here was the driving of Kenneth MacKenzie, 15-year-old New Haven, Conn., youth. In the Class F, Division II, event he drove his Hooton boat, equipped with an Elto motor, 42.654 miles per hour. This was the world's record for the new class, rules for which were but recently made by the National Outboard Motorboat Association.

Warren G. Harris of Milbury, Mass., established a new record for Class E, Division I, in that event. In the first heat he drove at the rate of 36.392 miles per hour and in the second heat he covered the distance at a rate of speed of 37.115 miles per hour.

In Class B, Division III, Albert Rockwell of Wethersfield, Conn., established a record for the class by making the five miles at the rate of 32.400 miles per hour. He had a Lockwood Chief motor and a Porteus boat.

W. G. Harris is a 17-year-old amateur. He took high honors for the meet, scoring 2,950 points. I. W. Dillon of Lawrence, Mass., was second with 2,729, Marshall Eldredge of Boston, national champion, third with 2,324, and Richard Knight of Pawtucket, R. I., fourth with 2,303 points. Eldredge, with points attained in the Westerly meet, leads the field this year for national honors. Ross Maddocks is a runner-up. Harris, winner of the local meet, and Knight, who was fourth, are amateurs and cannot compete for the national honors.

Eldredge lost an opportunity to get the most points for the meet at the start of the last event, which was the Class E race. He drove his craft, traveling about 40 miles per hour, into the side of the committee barge, throwing him into the water and wrecking the boat. As this happened in the first heat he lost a possible 800 points. Connecticut lost one of its fastest boats before the start of the fourth event on the first day's program. The craft, owned and operated by Hans Behr of Waterbury, Conn., was completely demolished when it collided with one owned by Earl V. Thomas of Fall River, Mass. Both drivers were thrown into the water but escaped injury.

Massachusetts had the largest representation of drivers. Her powerboat association was not entered in the triangular meet but would have won had it entered. A special trophy was awarded the winning club and nearly 100 individual cups to the event winners.

The Westerly Yacht Club has only been organized about four years. It has done much to stimulate navigation on the Pawcatuck River and is ever active in yachting circles. It has conducted several regattas over its course, which from time to time has been highly praised by reputable drivers. For the last regatta the club had the cooperation of a new and lively Chamber of Commerce, whose work was largely responsible for the large number of entries. Thousands of people visiting Westerly and other Rhode Island shore resorts joined racing enthusiasts from all parts of the East in crowding the banks and surrounding slopes of the river to witness the event. It was colorful—the interest was intense—and the competition strong. In each event, some with between 40 and 50 boats starting, the finishes were close. The roar of the speedy motors and an occasional spill added to the excitement of the occasion. Several airplanes, many of which were carrying passengers from the three Westerly airports, and a great many yachts floating on the river, gave added beauty to the scenery.

Officials of the Yacht Club were more than pleased with every detail of their program and the support given it. Chamber of Commerce officials likewise reported satisfaction.

The race officials were:—E. J. Grady of Boston, official timer and scorer for the American Powerboat Association, chairman; Arthur Miller, commodore of the Rhode Island Powerboat Association, and national referee for the American Power Boat Association, referee; Mrs. Miller, official scorer; Clinton Scholes of Essex, Conn., George Natley of Newport, and C. A. Ladden of Groton, Conn., timers; Dr. John Helfrich of Westerly, starter; and Wilfred H. LeVeque of Woonsocket, R. I., assistant starter.

A brief summary of the races follows:—

George C. Raymond, Hartford, winner Class A, Division 1; Howard Fuller, Watch Hill, R. I., winner Class B, Division 2; M. H. Eldredge, Boston, winner Class B, Divisions 3 and 4; Walter Kopke, Essex, winner Class C, Divisions 1 and 2; M. H. Eldredge, Boston, winner Class C, Divisions 3 and 4; Warren G. Harris, Millbury, Mass., winner Class D, Divisions 1 and 2; Bert Steacie, Worcester, winner Class A, Division 2; Elliot A. Spencer, Westbrook, Conn., winner Class B, Division 1; Marshall H. Eldredge, Boston, winner Class C, Divisions 3 and 4; I. B. Dillon, Lawrence, Mass., winner Classes E and F, Divisions 3 and 4; Kenneth MacKenzie, New Haven, winner Classes E and F, Divisions 1 and 2; and I. W. Dillon of Lawrence, winner of the family race.

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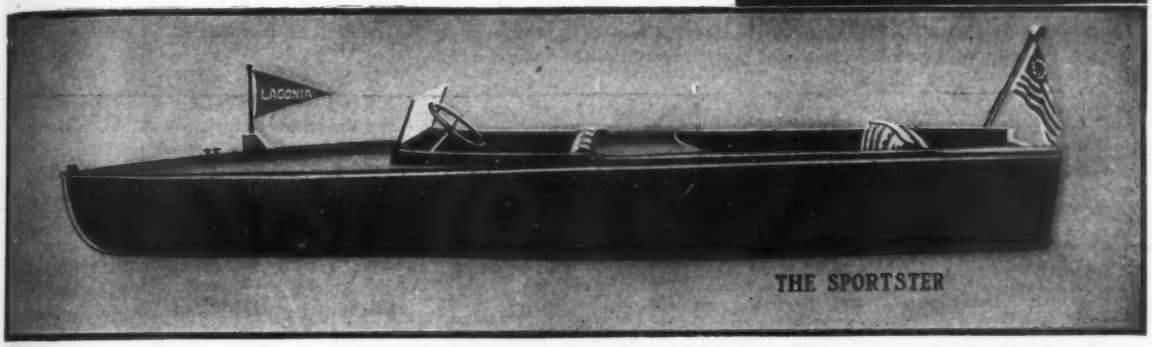

THE SPORTSTER

THROUGH the liquidation of the Boat Department of the Laconia Car Co., you may now buy a 16′ Standard SportSter, fully equipped, for $200 f.o.b. Laconia, N. H. Regular retail price was $369.

These boats are smart in appearance, are manufactured to the highest standards, and have been subjected to rigid inspection. They are real runabouts that you will be proud to own. They are built to give years of service, and can be used with any outboard motor of Classes B, C, D, and E, developing speeds up to approximately forty miles per hour. They can be driven from either the forward or after cockpit. Cockpits have comfortable upholstered cross seats. Nestled below windshield is motor car type steering wheel.

These boats are equipped with deck hardware, bow lights, stern flagpole and light, windshield, steering wheel and life preserver cushions. To those people of particular discrimination, they have every refinement which contributes to perfect enjoyment of water motoring and pride of ownership.

There are but 20 of these boats left, and they will go to the first who clip this coupon and attach their check.

SPECIFICATIONS

	SportSter
Length over all	15′ 11″
Beam over all	52″
Weight complete *(without motor)*	350 lbs.
Weight, crated	750 lbs.
Planking and decking	Philippine Wood (Individual planks)
Bottoms	Double planked, with cloth set in white lead between layers for watertightness, painted with anti-fouling bottom paint. Additional stringers besides keel and chines to provide required bottom strength.
Sides	Batten seam construction.
Ribs	Assembled with brass bolts, nuts and washers. Designed for maximum strength.
Fastenings	Copper or brass throughout.
Hardware	White nickel brass.

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LACONIA CAR COMPANY, Laconia, N. H.
Gentlemen: Enclosed find check for ☐ SportSter $200

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THE MONTH WITH THE OUTBOARDS

Items of Particular Interest to Followers of the Sport

CRUISING LAKE MICHIGAN BY OUTBOARD

JOE BRUBAKER of Evanston, Illinois, in a 12-foot boat of his own construction, powered by a 12 h.p. Elto Speedster motor, has just completed a 600-mile trip on Lake Michigan.

On the first day out Brubaker drove his craft from Evanston, Illinois, to Port Washington, Wisconsin, a distance of approximately 120 miles. The second night found him resting in the harbor at Manitowoc after riding the waves for 60 odd miles. The next day the lake was exceedingly rough, but Brubaker ventured out, nevertheless, although he covered only the 10 miles up to Two Rivers.

The shelter of Sturgeon Bay canal welcomed him on the following evening after traversing about 150 miles. Washington Island was his next destination; then Menominee, Michigan. Brubaker then drove his tiny craft back to the Sturgeon Bay canal and on the evening of the sixth day arrived at Two Rivers, Wisconsin, again. On the seventh day he travelled from Two Rivers to Sheboygan, finishing his vacation trip on the eighth day by going all of the way from Sheboygan to Evanston, a distance of well over 150 miles.

On the last day Brubaker started at 4:00 A. M., stopped at Port Washington and dropped in for a few minutes at the Milwaukee Yacht Club. Members of the club had noticed him come into the harbor and inquired as to whether he was on a trip. In response Brubaker, who seemed very unconcerned, stated that he had just arrived from Sheboygan and that he was on his way to Evanston. This caused a great deal of astonishment, particularly in view of the tiny craft and its comparatively small Elto outboard motor.

At night, moored in the various harbors, Brubaker would make himself comfortable by rolling up in blankets and being rocked to sleep by the gentle motion of the boat.

The Elto Speedster, which supplied unfailing power throughout the long journey, had been equipped by Brubaker with a pulley at the top of the flywheel, from which he drove a small generator from which the storage battery was kept charged and which, in turn, furnished current for running lights at night.

Brubaker said that this was his vacation trip and that he had enjoyed it immensely.

At Stillwater, Minn., a 10 h.p. Johnson was pressed into ferry service on this heavy barge when a bridge was taken out across the St. Croix River

AMERICAN LEGION WILL HOLD BIG REGATTA AT BOSTON

According to word received from the chairman of the Entertainment Committee of the American Legion, that organization has decided to stage a big one-day regatta at Boston on October 6. This date has been approved and plans are being made to have it run under the auspices of the New England Outboard Motor-Boat Association. Tentative arrangements call for the posting of twenty-four cash prizes and a like number of merchandise prizes for the various events.

BAY CITY GROUP ORGANIZED

For the purpose of governing and protecting boating activities in their territory and for the further purpose of obtaining official sanction for a group of outboard races to be run in the near future, a group of boating enthusiasts of Bay City, Michigan, gathered recently and formed a local branch of the American Power Boat Association.

Lionel Bailey was elected commodore of the club; Albert Kleeman, vice-commodore; Paul Wendland, secretary; and Ben Boutell, treasurer. The group as organized includes fifteen members at the present time with assurance that this number will be greatly increased within the very near future.

(*Continued on page* 168)

William Miller, of Auburn, R. I., scored seventeen victories in major regattas last season

Joe Brubaker in the home-built boat in which he cruised Lake Michigan

FAMOUS **Century** BOATS

THREE RACING BOATS

MIDGET	CYLONE	HURRICANE
$225.00	$250.00	$345.00

THREE OUTBOARD BOATS

SCAMP--15'	TRAVELER, JR.--17'	TRAVELER DE LUXE--17'
$250.00	$425.00	$535.00

THREE INBOARDS

SEA-MAID--22--15'	SEA-MAID--33--17'	SEA-MAID--40--17'
$735.00	$1085.00	$1165.00

A FLEET OF BOATS TO FIT EVERY PURSE AND PURPOSE

On Display at Prominent Dealers

CENTURY BOAT COMPANY

MANISTEE MICHIGAN

CENTURY KING OF THE SEAS BOATS CENTURY BOAT COMPANY

THE MONTH WITH THE OUTBOARDS

(*Continued from page* 166)

THREE NEW RACING MODELS

Three new improved racing types of outboard motors have been added to the 1930 line of Johnson Seahorses—one of these, the new C class, Seahorse 24. Numerous improvements have been made on the racing models of high speed rotary valve, class B twin, the Seahorse 16, and also on the big 4-cylindered high speed D class 32. The new racing model of the Seahorse 24 is a powerful 2-cylindered class C motor.

The new engines are equipped with an improved type of rotor design which allows quick opening and closing of the gas passage, thereby permitting the gas to enter the motor with less resistance. This in turn makes for a higher volumetric efficiency, higher crankcase pressure and more thorough scavenging of cylinders. An improved type of carburetor eliminates the necessity for fuel lift pumps. Other improvements have been embodied in the construction of the magneto to make it 100% waterproof and to enable it to generate a higher spark, which accounts in part for the unusually easy starting which is a feature of these motors. Salt water cannot harm it. Another feature is found in an improved type steering handle design of more sturdy construction arranged with spark cutout mechanism and easy throttle control.

H. W. Duncan's Sea Serpent, driven by E. Bennet, and powered with a Sea Horse, has won every Class B race it entered in Australia this season

NEW CLUB RUNS SUCCESSFUL REGATTA

A short time ago the Jackson Boat Club of Jackson, Michigan, was organized by prominent local yachtsmen as a unit of the National Outboard Association. A. L. Ward was elected commodore of the new organization; Dad Hart, vice commodore; Howard Griffith, secretary, and Bill Withington, treasurer.

Their regatta program was opened on Memorial Day when between two and three thousand spectators witnessed a most successful series of races at Clarklake. Bill Withington won the Class B, Division I, five-mile race in 6 minutes 19½ seconds and Ash Ward placed second. A 5-mile race for standard motors was won by Bob Apted who covered the distance in 8 minutes, 58-2/10 seconds, closely followed by Bob Allen who captured second place. Bill Withington piloted his M 562 to first place in the 11-mile race with a time of 14 minutes, 31 seconds. Ash Ward, driving Dash-Ho, finished second. The family boat event was won by Phil Berger with a time of 8 minutes, 5 seconds for the 5-mile course.

Five trophies and prizes were awarded by the racing committee. Howard Griffith acted as starter and K. Major, B. Bissle and Dad Hart served as judges.

OUTBOARD DISTRIBUTORS ANNOUNCED

Word has just been received from the Boyd-Martin Boat Company that the increasing demand for Boyd Martin boats has necessitated the appointment of ten new distributors. The representatives who have just been signed up include: E. J. Willis Company, New York City; Hanson-Duluth Company, Duluth; Allmand, French & Thompson Company, Detroit; N. A. Fegen Company, Cleveland; B. H. Hegben Company, San Francisco; Midwest-Timmermann Company, Dubuque, Iowa; Travis-Cadillac Company, Peoria; Walter H. Moreton Corporation, Boston: Frank-Reach, Inc., 1905 S. Michigan Ave., Chicago; and Ruggles Motor Service, Milwaukee.

SILENCING THE OUTBOARD

Legislation in various states and popular demand for an outboard motor which is just as quiet in its operation as is possible to produce, has been responsible for extensive research and experimentation on the part of outboard manufacturers who have solved to a great extent the problem of removing practically all objectionable noise. Most of this has been accomplished through the medium of wet and under-water exhausts. The Maxim Silencer Company feels that the results secured still leave perhaps something to be desired and are engaged in the problem of applying to the outboard motor the same principles of noise reduction that they so successfully applied to many other types of marine and industrial engines so that we may reasonably expect wonderful results from a concern which has achieved such success in other fields. Their problem is not as simple as what it might seem at first thought since they are up against an entirely different proposition from that with which they have to reckon in silencing the big four-cycle motor. Most of the outboards today are two cycle motors which means that they have ports in the cylinder walls instead of valves in which the release of gases is so sudden as to be practically instantaneous. This necessarily means noise as any sudden shock to the air is bound to produce. Another factor that makes the job a difficult one is the comparatively high rates of speed at which these motors turn over, which of course means corresponding increases in the amount of noise. Manufacturers have gone a long way in making these efficient little units very quiet already and with the Maxim Company conducting their experiments with the manufacturer's cooperation, the outboard of the future bids fair to be a practically noiseless little motor.

SMALL BOAT INSURANCE

In an effort to afford all possible protection to small boat owners, directors of the National Outboard Association have extended the association's insurance plan for members to include protection and indemnity insurance. Never before has liability insurance been offered to owners of outboard equipment at anywhere near the low rates offered under this new plan.

Earlier in the year, the N.O.A. announced a plan under which owners and dealers might obtain coverage against loss by fire, lightning or theft and all marine perils including transportation risks. An arrangement was made with a leading insurance company whereby this protection was offered at the lowest possible rates with a special plan providing for the insuring of racing equipment. The N.O.A. makes no profit out of the plan, merely offering it as part of the organization's program to be of service to small boat owners.

All members of the National Outboard Association and those who own outboard equipment will be interested in the extended protection service now offered. If they so desire, they may take out insurance which will protect them for amounts for which they become liable to pay and do pay in respect of the following:

1. Loss or damage in respect of any ship or vessel, dock, slip, buoy or any floating or stationary object.
2. Loss or damage to any goods or merchandise.
3. Loss of life or personal injury and from payments made on account of life salvage.

This coverage extends to outboard owners a form of protection which has never before been available at anything approaching the moderate premium now offered. Private owners using boats for pleasure purposes may secure protection to the extent of $5,000 at a yearly premium of $12.50. Dealers or commercial operators may secure a $5,000 liability policy for $17.50. Increased protection is available at slightly higher rates.

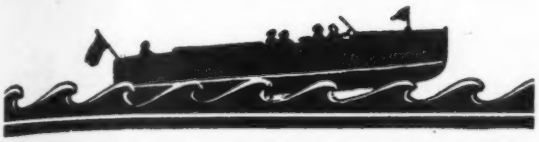
The insurance offered by the N.O.A. is broad, protecting the member against loss or damage of various kinds for which his boat may be held responsible under the law. The costs of claims brought against a member's boat will be recoverable under this new plan. Further, the owner of a boat is protected regardless of who may be driving it. As practically all automobile owners carry some form of liability insurance, the service now available is expected to prove popular among boat owners.

EXPLORING AFRICA VIA OUTBOARD

Martin Johnson, internationally known explorer, has just acknowledged the receipt of a Johnson outboard motor which he will use in exploring tours of the interior of British East Africa.

The American-made motor was received at Nairobi and was to be carted to the Congo and used on the Semelki and Victoria Nile Rivers.

(*Continued on page* 170)



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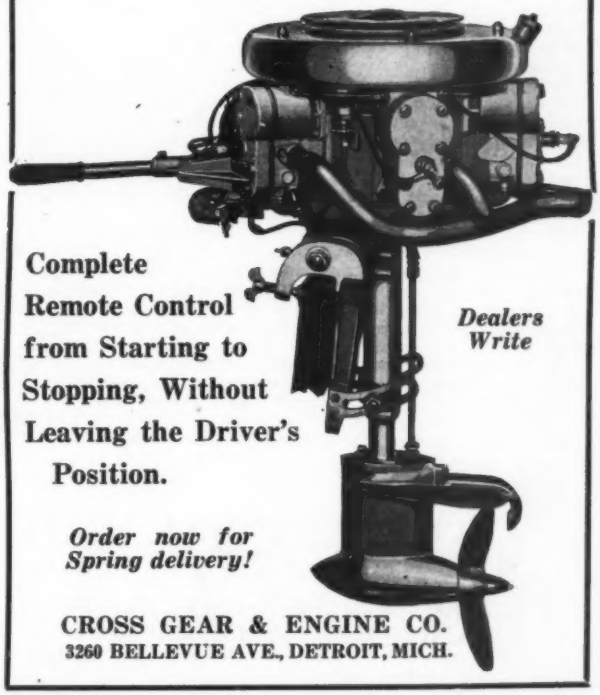

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Outboard Motor Headquarters

BRUNO BECKHARD

Flushing Bridge

FLUSHING, N. Y.

BOATS *MOTORS* *REPAIRS*

LOOKING INSIDE THE OUTBOARD ENGINE

(*Continued from page* 162)

carbureter is adjusted to give the proper mixture, then admitting additional air at another point makes this mixture too lean. Suppose the carbureter mixture, then, is made richer to compensate for this additional air. That will correct the situation for one particular speed. But if the motor is throttled, less mixture comes from the carbureter, the same amount of air as before enters the auxiliary openings, and again the resulting mixture is too lean. Any air which may be admitted without affecting the fuel flow from the nozzle and without passing under the control of the throttle valve will up-set the mixture ratio for every change of speed and cause trouble.

Auxiliary third port openings drilled into the cylinder walls for admitting additional air have exactly the same effect; in fact, unless some means is provided for closing them when staorting it is very difficult to get a sufficiently rich mixture into the motor to start readily.

In the four-cycle engine the fuel charge is drawn directly into the cylinder. Evaporation of the gasoline causes some refrigeration and the mixture sometimes travels a considerable distance through manifolding before reaching the cylinders. It is common practice, therefore, to provide a hot-spot in the intake manifold to warm the ingoing charge and assist vaporization.

In the two cycle engine as used in the outboard motor, the charge is drawn into the crank case where the temperature is rather high—the whole motor gets rather warm—and where it is stirred by the rapidly moving crank shaft and connecting rods. Compression in the crank case still further heats the mixture. It is then projected through the by-pass port against the very hot deflector on top of the piston and swirls into the hot cylinder and mixes with the remaining hot exhaust gases. It seems apparent that the mixture of the two-cycle motor has sufficient opportunity to become heated to a point where the particles of liquid gasoline are rather completely evaporated. This conclusion is strengthened by the fact that the oil which collects in the bottom of the crank case is surprisingly free from the gasoline with which it was so thoroughly diluted. Both heat and turbulence—mixing and stirring—are necessary to quick vaporization of the gasoline. There is plenty of both in the outboard motor.

The actual degree of vaporization which occurs in the carbureter should be as perfect as possible, but would seem to be relatively less important than the proper proportioning of the fuel to the air. Yet, the whole problem is somewhat confused by the presence of such a large proportion of lubricating oil in the liquid fuel. This unquestionably makes atomization of the liquid more difficult and vaporization of the gasoline harder to accomplish quickly.

Modern outboard motor carbureters are nevertheless surprisingly effective in the automatic metering of the fuel to the air; in maintaining the correct proportions automatically with changes in throttle position and speed; and in atomizing and mixing the fuel with the air. That is its whole purpose and it does the job.

(*To be continued*)

THE MONTH WITH THE OUTBOARDS

(*Continued from page* 168)

A LETTER FROM BRUNO BECKHARD ON CALIFORNIA VS. FLORIDA

July 16, 1930.

Comm. David Mackay,
Elsinore, Cal.

Dear Commodore:

I have seen two articles under your name in the National Outboard Magazine, both dealing with the Florida situation.

I am writing you not with the idea of publication but because I believe we are working toward the same end but pulling in different directions—and because I believe cooperation will get both of us further.

In both stories you refer to the fact that there was a big field for the Green trophy in 1929 and a small field in 1930 and you claim seven entries for the latter. Now we had a meeting of the boys that were in Miami for that particular race and there were 23 of them. I think you will find that twelve is the number that survived. That, however, is not the major point. You have used the number to show a decrease in amateur drivers—whereas that wasn't what the shooting was about in Florida. I do not know how much of the story you got. It is much easier for you to take a shot at the situation from your distance than it is for me, for I plan to spend my winters in Florida. I spent last winter trying to find out what it was all about—and they don't love me for it. That part is all right—but I hate to see you making the fight harder.

In 1929 we let all the boys run except those actually employed by motor manufacturers—and the winner was later disqualified for just that reason. In 1930 we limited the event to the newly formed Divisions I and II. In theory the Florida season opens the year. In practice it winds it up. There were practically no Div. I and II races in Florida, the local drivers having been thrown out of that group. These same drivers thereupon set up their own rules—led by two or three men who figured on local glory. I cannot myself see that they get anything out of it but the pleasure of wearing commodores' caps—but it's their money. There isn't any sense blaming the drivers. Perhaps a dozen of them have been making some sort of living out of racing and they looked on the new rules as an effort to take away their bread and butter. But the men that paid the bills set out to upset the new rules—and what they tried to do was to get a Div. III driver into various local events and then claim that all the drivers in those events were thereby contaminated. It was their avowed intention to make it impossible for us to make any field for the Green trophy. Therefore the 23 amateurs we found—even if they couldn't all stand the pace—were to us decidedly encouraging. By the same token, your repeated reference to the small field is merely a source of comfort to the enemies of the very cause you are working for.

Personally I think our whole present effort is going to defeat its own end. There are two kinds of racing. One for beginners who must sacrifice everything for equality. It is a fundamental error in this kind of racing to stress speed at all. A beginner's class should be limited to equipment and should have a scoring system—without reference to miles per hour. It is ridiculous to provide D and F races for beginners. If we had A for Juniors and B for seniors we would have plenty of good amateur novice racing.

The second form of racing is for speed. Now boat racing is not like foot racing nor like any of the forms of a sport dependent on the *person* or the participant. Automotive racing comes down to mechanical efficiency and driving ability. One is a matter, in one form or another, of shop work and the other is a matter of experience.

Now when you introduce the element of money into this situation you get an entirely different reaction. If you are seeking speed, money is merely a method of getting more shop work (as an element) done in less time. Fergie, for example, has had a number of years of shop experience. You call him an amateur simply because he is not paid to race but you will I believe admit that he is a skilled and experienced driver. He now rates as Division II. Division II is cockeyed in that boys like Fergie can choose whether or not to ride in it but boys of school age are obliged to ride in it. Consequently any youngster that wants to make a showing does not have to compete merely with other boys but has to compete with the best driver of all, while older boys can escape this test by choosing some other division. Now how is a boy of high school age going to set about beating Fergie in this year of grace? Obviously, by spending money. The chances are he can't beat him anyway—but his only hope is buying equipment and service. The father of our eastern intercollegiate affair told me he spent $50 for spark plugs at that one event. I know another youngster whose father has spent close to $20,000 this season. Ridiculous if you will—but more serious in that it discourages the boy of average means. In other words we are setting the pace altogether too high for the youngsters and in doing so we freeze out more good material than we develop. For the self same reason I have always opposed shutting out local dealers and their helpers. How else can the boy of moderate means get to the water? How else can we develop the boatmen of tomorrow? I'm all for bringing the rich boys down to the level of the boys that work to win. That to me is a lot more important problem than the handful of paid drivers that give exhibitions in Florida.

Very truly yours,
B. B.

Get the specifications of this NEW FAYBOW

18 foot, 40 H.P. INBOARD RUNABOUT

ALL-MAHOGANY

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F.O.B. FACTORY

An extremely low price for a boat of this length and class.

NEVER before have FAYBOW design and craftsmanship been offered at the low price per foot of this new 18 foot Inboard Runabout.
FAYBOW craft of today are the product of more than a quarter of a century of boatbuilding experience—craft that are outstanding for performance and reliability.
This newest FAYBOW model is an unusually smart looking, all-mahogany boat. Seaworthiness is assured by its broad beam and ample freeboard. Its unique underbody design permits high speed in the roughest water without the usual vibration.

40 H.P. Lycoming Motor. Speed up to 28 m.p.h. Single forward cockpit; power plant aft; direct drive. Length 18', beam 5'6", draft 16".

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Don't let a low price influence you; a life saving garment that does not offer adequate protection has absolutely no price value.

Every Kapo Kantsink garment is tested to meet a safety standard.

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by INSTALLING new ignition wire and Rajah Terminals in seven out of ten engines.

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It is full of brand-new designs: inboard—outboard—cruisers—sail and row-boats. You will find just the design you want. You can own a fine boat for surprisingly low price.

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For Class I and Outboard Boats
The sturdy one-piece construction of this light makes it ideal as a towing post. Made in one-piece casting; brass or aluminum highly polished.

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Racing Propellers for Outboards

BRYANT & BERRY PROPELLERS

1202 LILLIBRIDGE STREET DETROIT, MICH.

THE TUMBLING OUTBOARD RECORDS

(Continued from page 153)

In Class C Division III Ross Maddocks covered five miles in competition at the rate of 38.135 establishing a mark in this class and division since there was no prior record. In the mile trials for Class C Division I, W. Kopke was able to attain a speed of 43.426 which wipes out Miss Muller's record established at Worcester. In Class C Division III, Ross Maddocks again set a mark of 38.135 in the mile trials which is identically the same speed he accomplished in the five mile competitive class. A. Rockwell in Class D Division III covered five miles at the rate of 30.405, and in Class F Division I, W. Harris accomplished the same distance at a speed of 37.113. Ross Maddocks in Division III of Class F did the five miles at the rate of 40.540 all of which constitute records for the several classes and divisions. Further mile trial marks were set by A. Rockwell racing in Class D, Division III when he covered a mile in 32.432 and W. Harris in Class E Division I who reached 37.113 m.p.h. Again in Class F Division II, K. MacKenzie was able to cover the mile in 42.654 which was the mark set by the biggest engines in the day's racing.

While all this was taking place in the east, Madison, Indiana, was the scene of the Mississippi Valley Power Boat Association's Regatta where they also tried successfully to set up some records. Class C Division I produced a five mile mark when Flash III was driven by her owner Jack Smith at the rate of 40.88 m.p.h. Class C Division II also over a five mile course, J. Maypole drove his boat Full Quart at a rate of 41.919. In Class C Division III, G. Cost set up a mark of 42.056 m.p.h. Jack Smith in Class C Division I accomplished a mile at the rate of 39.793. Again G. Cost driving a Class C Division III boat was able to improve the old mark by setting up a claim for 44.355 m.p.h.

Albany, New York, also tried to achieve fame with a record smashing attempt and succeeded in producing eight new marks over the Fourth of July. The first of these comes in Class B Division III when K. Garrett succeeded in driving his boat Miss Berkshire for five miles at the rate of 35.643. Class C Division II also produced a new mark for five miles which wiped out a record of H. G. Ferguson's and established a new one of 40.723 m.p.h. C. Scull driving his boat Floating Star was responsible for this mark. In Division III of Class C, F. Brobeil created a new mark for five miles when he negotiated this distance at the rate of 40.358 m.p.h. Another five mile mark was that established by G. Pauli when he covered this distance in 42.155 m.p.h. with a Class D Johnson engine and racing in Division III. He also set up a Class F Division III mark of 42.115. In Class F Division II, W. Crawford set up a five mile mark which wipes out an earlier one which was made at Skaneateles. He covered this distance at the rate of 41.763.

In the mile trial attempts, A. Cappell with a Caille engine competed in Class C Division I, setting up a mark of 41.906. In Class C Division III, F. Brobeil was able to make an average for the mile of 44.198. Vampire II, a little boat driven by P. Sawyer over the mile course in Class D II was able to do this at the rate of 42.051 m.p.h. which wiped out a California record for the same class and distance.

As will be noted in the summary of all records to July 15 which appear elsewhere in this issue, the various outboard engine manufacturers have divided these honors among themselves. The Class A records are practically all held by the Lockwood Ace which is the only small engine made in this class. The Class B records are held by Johnson engines, while the Class C in most cases are credited to Evinrude engines. Again in Class D the Johnson engine has to its credit all of the records while Classes E and F show that Johnson, Elto and Evinrude engines all share in the honors.

When it is recognized that all of these records are made under skillful supervision of accredited officials of the American Power Boat Association and the National Outboard Association, it will be seen that the holders of these records have really accomplished something worth while and there is no disputing the claims which they make either for time or distance as these points are most carefully observed by the officials. Similarly the inspection rules which are followed out prove that the engines used in all cases are stock machines such as are available to anybody who cares to use them.

THE BEACON

May 1930 saw the publication of the first issue of the newly launched Beacon, official organ of the Sheepshead Bay Yacht Club. This monthly sheet will be devoted in particular to the interests of the club and the stimulation of motor boating and water sports in general. It will keep, through the medium of its interesting columns, club members posted on the doings of their organizations, and general activities in the sport throughout the country.

Advertising index will be found on 3rd last page

YACHTING IN THE BASQUE COUNTRY

(*Continued from page* 155)

First of all there will be the outboard competition—a competition which is always a great success. Numerous cups have been offered for these races by members of the club, as well as important cash prizes.

But the great sporting event of the season will be the Jean Patou Cup Race, which was first run in 1929 at Venice, where the cup was won by the donor. This year it will be fought for on the ocean—from Biarritz to Saint Jean de Luz and from Biarritz to San Sebastian.

The finest motor yachts of the coast will take part in this competition which is a real race—being from 60 to 100 kilometers.

Finally, after the fatigues and emotions of sport, the social life of the club will be taken up with more brilliance than ever.

Bridge tournaments—for which there are prizes of great value—will be held in the beautiful salons, while unending and joyful chatter will go on at the bar, or on the lovely terraces which overlook the river.

There once again, at the day's end, when the setting sun permits of the cocktail in the open, will be seen the lovely ladies of the Spanish ad Argentine colony, amusing themselves watching the prowess of the outboard riders, or admiring the rhythmic and disciplined strokes of the rowers in the racing gigs.

The graceful yachts, going up the Adour, will once again follow the trail of the green islets which fill the river above Bayonne—those little islands under whose great shady trees the gayest of picnics are held.

From morning to evening there is laughter and happiness in these lovely places, till the hour for returning brings the exodus of swift automobiles en route to Biarritz.

Thus at the Canot-Club, during the summer season, pass the healthiest, freest, most luxurious days for that exclusive circle of lovely women and well-known men that the Marquis d'Ivanrey has gathered about him.

THE HUDSON SMILES

(*Continued from page* 159)

them at the table were the Brobeils, father and son. The Scull, Hatchitt and Clifford families were out in force—you can figure what that means—and so on down the list. Now note that this was the first opportunity we have had to plan races under the new rules—and the new rules, while possibly not perfect are nevertheless intended to protect and encourage the younger drivers. Add to the above Cappel and Sunderland of Dayton high school fame, the two Sawyer boys from Pennsylvania, Ken Jarret (also with a father) and Louis Smith of Albany and Hilton Fraser of Lake George, and you cannot escape the conclusion that the boys are coming into their own.

Add to this group the leaven of such drivers as Carl Mason, Lowell Preston, Harold Chapman, Dougas Haskins, Clarence Collins and William Schanz, and you have a field worth watching.

At all events when somebody gives you a nice new date book next Christmas, open it to July 4th and write just one word: Albany. You can't go wrong.

MINNEAPOLIS EVENTS

The Northwest Speed Boat Association has recently leased Lake Marion at Antlers Park, seventeen miles south of Minneapolis-St. Paul, for a period of three years for the express purpose of securing an excellent race course for the many outboard events which they are proposing to run during the course of the next few years. Lake Marion is one of the finest courses in America, being smooth practically all of the time because of the surrounding hills. Docks are being built to provide facilities for a great many boats and it is the expectation of the association to put on a series of races of the finest sort. During 1931 they expect to put up $12,000 in prizes on this race course. For this season in addition to the July 13 race already run, another is scheduled for August 10 and a big regatta for September 1. On this date the famous Speed Miller Trophy will be competed for together with 50 other beautiful trophies. Inquiries by prospective contestants should be addressed to Speed Miller, care of Northwest Speed Boat Association, 2422 Penn Avenue North, Minneapolis.

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Scientifically designed, beautifully balanced, for towing—

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The outboard-motor-propelled aquaplanes—

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Standard type and genuine Waikiki Model—

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National Distributors of Water Sports Equipment

Skiboards make thrilling races.

RELEASE that BRAKE!

Water Resistance is Wasting at least 10% of your Power

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No upkeep labor or expense. Nothing to rot, check, tear, split or warp. The strongest, longest lived boats ever produced for outboarding. Beautiful enduring colors, advanced designs. To be really up on outboards, see Mullins Boat Book. Write and it's yours.

MULLINS MANUFACTURING CORP., SALEM, OHIO

A VICTORY
That Really Counts!

ON June 15th, a LYMAN 13-foot sea skiff driven by Charles DeWitt of Port Clinton, Ohio, was the first boat to flash across the finish line in the Milwaukee to Chicago Marathon. From a fleet of thirty-three starters, LYMAN captured five trophies with six entries —the grand prize, 2nd and 3rd in Class B and 2nd in Class D, E and F.

It is not the actual winning of such a race that is important to you; but the fact that this event was devoted exclusively to displacement hulls driven by amateur drivers is a significant point. With the above record set before you, the value of a quality product is incontrovertible. LYMAN offers the utmost in construction, design and performance, and what our boats did at Chicago is merely a repetition of the results they are giving in everyday service throughout the country. . . . Send for catalog. Models 8 to 17 feet.

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Every outboard racing pilot needs an

AC TACHOMETER

To get the most out of your engine, you must know just what your engine is doing.

The *new* and *improved* AC Tachometer is now priced at $20 complete, slightly higher in Canada. Write for descriptive folder and kindly give name of your nearest dealer.

AC Spark Plug Company
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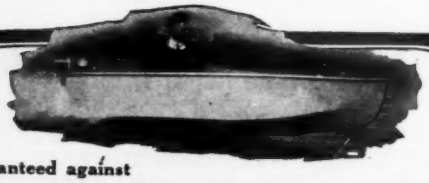

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PENN YAN BOAT CO., Inc.

155 Water Street Penn Yan, N. Y.

PENN YAN DINGHIES

INSPECTION FOR RECORD ENGINES

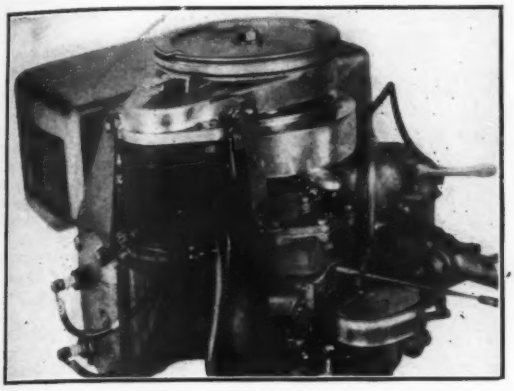
(*Continued from page* 161)

3. Record; Model.....Serial No.....
   Name of Owner.....
   Address of Owner.....
   Name of Driver.....
   Division entered.....Was affidavit filed?.....
   Name of Boat.....
   Date and Place of Inspection.....
   Date and Place of Race.....
   The American Record, believed to have been made.....
4. Number of Cylinders.....
5. Bore of Cylinders.....Stroke.....
6. Compression volume.....Cu. Centimeters
   Set the piston in extreme outer position, spark plug removed; pour clean water (or thin oil) from the measuring glass into the cylinder until it is full flush with the top of the spark plug hole. Read the amount in the glass before pouring, and the amount left; subtract to find the volume required to fill the compression space.
7. Material of Piston.....
   Material of Connecting Rod.....
   Examine the connecting rods and pistons to see if they show signs of having been filed, drilled, or otherwise changed.
   If so, report it.....
   Remove and weigh connecting rod, weight.....
   Weight of piston with rings and pin.....
   Note: If rods and pistons show no signs of having been modified, removal and weighing may be omitted, if desired.
8. Carbureter: Make.....Model No.....Size.....
   Diameter of Smallest Opening.....
9. Type of lubrication.....
10. Gear Reduction: Remove the spark plugs. Turn the flywheel as many full turns as teeth specified in the large gear. The propeller should then turn as many full revolutions as the number of teeth specified in the small gear or pinion. Static ratio: .....
11. Ports to Crank-case:
    In a two-port motor (such as some models of the Elto) measure the opening into the crank-case.
    In the Johnson (with rotary valve) measure the height and width of the opening in the side of the rotary valve.
    In a three-port motor (such as Evinrude or Caille) proceed as follows:
    See Figure 1 herewith.
    Measure D.....
    Measure B.....
    Subtract,
    giving.....,which is the effective width of the third port.
    Examine the length of this port—if it has not been chipped or filed, check roughly with specifications, otherwise report its exact dimension measured around the circumference of the cylinder bore.
12. By-pass Ports:
    See Figure 1.
    Measure dimension A.....
    Measure dimension E.....
    Subtract, which gives....., which is the effective opening of the port. Check length as before.
13. Exhaust Ports:
    See Figure 1.
    Measure dimension C.....
    Measure dimension E.....
    Subtract, which gives....., which is the effective opening of the port. Check length as before.
14. Number of intake valves (in a two-port design).....
15. Free diameter of valve.....
    This is the diameter of the hole which the valve closes.
16. Standard lift of valve.....
17. State if any auxiliary porting is used (such as the third ports used in Elto Hi-Speed Quad).
18. Check specifications of intake valve spring (in two-port design) .....
19. State whether special parts have been added to the motor, if so, what and why.
20. Does the motor, externally or internally, show evidence of having been modified from factory construction?.....
    In what way?.....
21. Was the motor re-assembled in good condition to the satisfaction of the owner?.....If not, why?.....
22. Was the motor held between the race and the time of inspection so that no changes could have been made during that time? .....

Signed.....Inspector
" "
" "

ELECTRIC STARTER

to fit on any Outboard Motor



Onan Electric Starter installed on 1929 Johnson 4-cyl. Sea-Horse

Here is a POWERFUL, LIGHT-WEIGHT 6-volt STARTING UNIT. Weighs approximately 14 lbs. Complete with fittings for attaching to any Outboard Motor.

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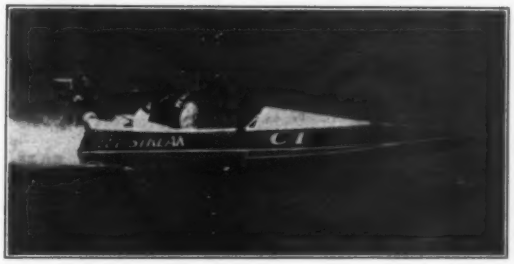

When you have read all the sensational, high-powered ads. misrepresenting certain Boat Builders as having produced the "World's Fastest" step hydroplanes, take a few brief moments and consult the only official list of accredited World's Speed Records, as published in this issue, by the A.P.B.A., M.V.B.A. and N.O.A.

This list reveals just one conclusive FACT, namely, that Standard one-step "ELSINORE" boats now hold MORE WORLD'S OFFICIAL RECORDS THAN ANY THREE OTHER BOAT BUILDERS PUT TOGETHER.

If then YOU desire maximum speed and to be among the winners send us your order with class desired and motor used. DO IT NOW and avoid disappointment in the Fall rush.

B and C Class $210
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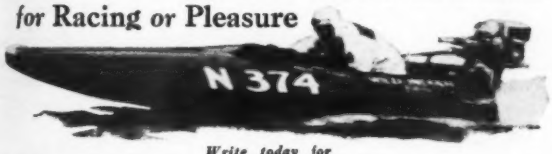

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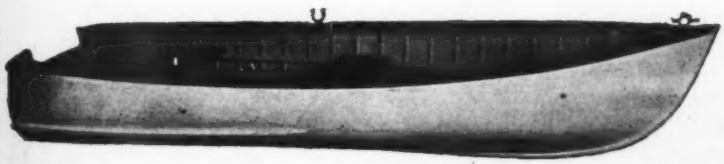

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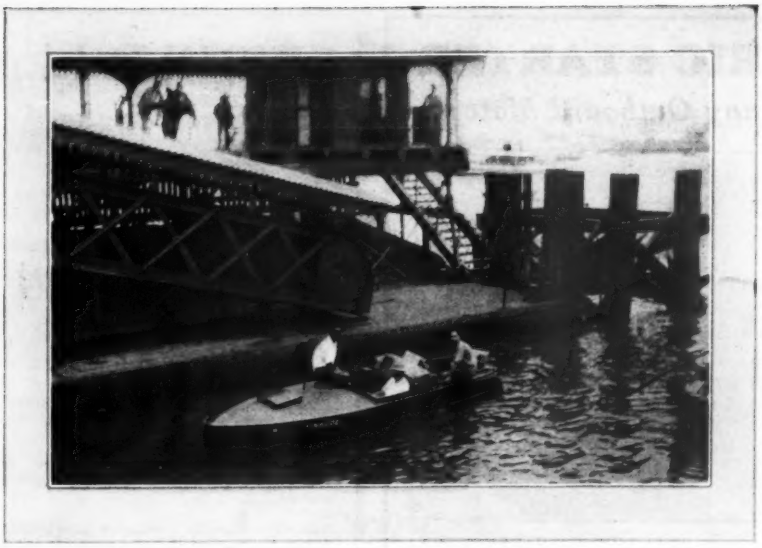


Back at Johnston's Pier in Singapore at the end of a thrilling trip

FROM SINGAPORE TO MALACCA

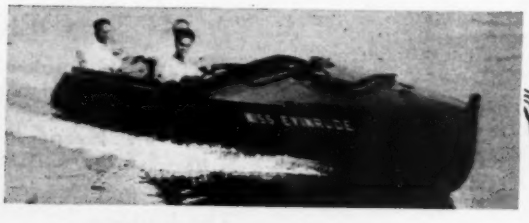
With an Outboard Engine for Power, Three Adventurous Men Cruise 240 Miles in the Treacherous Straits of Malacca

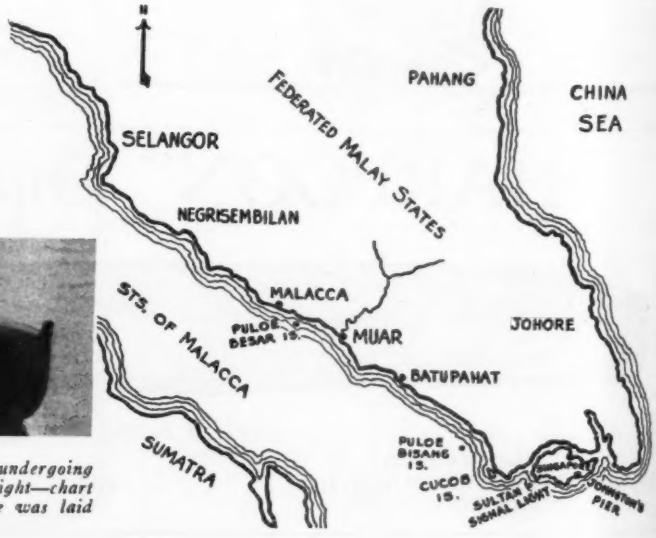
By A. P. GAUDART

SITUATED on the west coast of the Malay Peninsula, 120 nautical miles northwest of Singapore, which lies at the southern extremity, is the ancient town of Malacca, popularly known to the inhabitants of Singapore as Sleepy Hollow. The eastern coast of the Peninsula is exposed to the China Sea; on its western side, the Straits of Malacca separate it from the off-lying island of Sumatra. The Straits have a reputation for the unreliability of the weather, due to the sudden and violent squalls which unexpectedly sweep across from the general direction of the island, giving rise to the name of Sumatras, by which they are known. The difficulties of navigating this western coast in a small boat are considerably increased by the fact that it is comparatively open with few harbors to afford protection from the squalls.

Being a confirmed outboard motorist, the prospect of an interesting run along the coast for a visit to old Malacca made a strong appeal to me so, accompanied by two equally enthusiastic outboarding friends, C. V. Conceicao and Charles McIntyre, a start was made from Johnston's Pier at Singapore on the morning of February 3 at 5:40 a.m., with Malacca the objective.

Our boat, Miss Evinrude, was a locally-built 18-foot runabout of V-bottom design and teak construction;





Miss Evinrude, with the cruisers aboard, undergoing trials on the day prior to the start. At right—chart of the open coast along which the course was laid

heavy and substantial; the engine an Evinrude Speeditwin, while a spare motor belonging to Conceicao was carried inside the boat. The list of equipment we were carrying revealed that we were giving the motor quite a job. For example, fourteen cans of mixed fuel accounted for 300 pounds of weight; the spare motor added another 100; anchors and ropes weighed about 40; a much needed ice box and its supply of refreshments came to 50 more; two leather bags containing our clothes, 80 pounds; while gas tank, tools and other incidentals added another 50, and brought the total load somewhat over 600 pounds. Besides this, we three passengers weighed 450 pounds and, finally, the hull itself was so heavy that it required eight good men to lift it. All in all, quite a sizable job for the little Speeditwin.

Nothing exciting took place during the early stages of the journey except that it was necessary to stop the engine a couple of minutes on two occasions to clean the gas filter. Our tank was mounted across the boat and fed the carbureter direct from it through a flexible tube. From observations made we were doing nearly ten knots but met a strong current when we got to Puloe Pisang Lighthouse. The sea was like glass; there was not a breath of wind and our topees did not offer much protection from the fierce sun. However, we did not grumble because this was preferable to a shower. The current was particularly strong and instead of covering the distance from Puloe Pisang to Batu Pahat in about three hours—a distance of 30 odd miles—it took us exactly four hours. With the engine still revolving at top speed we carried on towards Muar, which we passed at 5:30 p.m.

It must have been raining hard at Muar. The wind changed a little and at one time we thought we could not escape a shower. Fortunately it passed off but the sea was far from pleasant. We were running before a strong wind and sea and found it rather awkward to steer our boat with huge rollers coming in from behind. We were wet from head to foot and as we had nothing to protect the spark plugs from the heavy spray which continually flew into the boat I was a bit anxious about the ignition system.

The sea soon became very rough and it was impossible to travel fast. However, we carried on as there was no sheltering place anywhere and got into Malacca River at 8:30 that night. There were quite a number of fishing stakes about the harbor, none of which had any lights, with the result that we very nearly ran one down.

After a lot of sight seeing we started on our return trip on Thursday, and called at Muar, about twenty miles south of Malacca. At evening a friend accompanied us for a run up the river on a crocodile hunt. The tide was not favorable for the sport and although we had a shot at one, had no luck. We resumed the homeward trip on Friday morning from Muar with the spare engine and the miles past uneventfully. There was nothing to do on board and the writer—particularly—whiled away the time froth-blowing. It was a pretty warm day and the cold beer in our ice box came in handy for the occasion. We sighted Sultan Shoal Lighthouse at about 6:30 p.m. and about 7:30 we were abreast of it. Here our troubles started as we should have had a bit of a moon, but it was nowhere in evidence and the night was very dark. The water in the neighborhood of Sultan Shoal is pretty treacherous practically all the year round as the currents from the China Sea and the Straits of Malacca meet there in a nasty cross rip. We made up our minds to stop for the night at Puloe Bukom (a small island where the Asiatic Petroleum Company has an oil station) about seven miles from Singapore. Owing to the strong wind and rough sea we got another drenching but arrived safely at Puloe-Bukom at 8:30 that night.

We all got home smiling the next morning, none the worse for our little adventure except that we were all badly sunburnt.

I might mention here that the trip described above has never been made before in an outboard motor and such a small hull, and I feel that we were very lucky that we did not encounter more trouble as we were unfamiliar with the places at which we called with the exception of the neighborhood of Puloe Bukom.

PHILADELPHIA'S AUGUST REGATTAS

Two major regattas, both of them sanctioned by the American Power Boat Association, feature Philadelphia's August racing campaign for outboards.

Outstanding is the Sir Thomas Lipton Trophy event, feature of the Philadelphia Outboard Regatta, on the Schuylkill River, August 8 and 9. That classic trophy will be in competition for its third year, while C. Mulford Scull, of Atlantic City, present holder of the cup, hopes to repeat with his new outboard, Shooting Star.

The other regatta is the sanctioned event of the Anchor Yacht Club to be held on the upper Delaware River, at Bristol, Pa., home of Senator Joseph R. Grundy, August 16 and 17. The first day's events will be devoted to canoe championships, while the second day will present a series of races to be called the Delaware River Outboard Championships.

Features of the Philadelphia Outboard Regatta will be a professional championship for the A. P. B. A., division IV, drivers for a handsome trophy, and perhaps an intercollegiate race, if sufficient college entries are received to warrant it. The committee has decided to abolish time trials, as part of the first day's program, Commodore William Freitag announces. The Philadelphia Outboard Regatta Association is in charge, with the cooperation of the Chamber of Commerce. This year's course will be shortened, too, to avoid danger of mishap on the shallow part of the course.

A one-mile straightaway, in front of the City of Bristol, has been selected as the course for the Anchor Club regatta. Two buoy turns will be used, the upper turn being in front of the club-house, and the lower turn in front of the southern end of the town. There is abundance of deep water right up to the club's float. All races will be for trophies. A. V. Morris is chairman of the regatta committee.

WHAT IS AN OUTBOARD RECORD?

There seems to be more or less confusion at the present time as to exactly what constitutes an outboard racing record, due to the establishment of the new racing rules which seem to conflict in certain particulars with the old unless properly interpreted. This condition has made it advisable to present a few facts which will help to clarify this situation.

For example, two records are being published at the present time in certain classes and divisions as world records, the later one of which is lower than the other, established prior to 1930. The reason for this lies in the new weight restrictions on racing hulls which require a certain minimum weight in each class. In ruling upon this point the Racing Commission felt that the records made last year under the old rules will stand until December 31, 1930 unless broken previous to that date. At the same time they believed that the speeds made under the new regulations should be entitled to some sort of recognition. Therefore they decided that the only equitable way to solve this problem was to allow both sets of records to stand; that is, the old records made under the old rules, and the new records made this year. If any of the 1929 speeds are bettered by 1930 boats the old record automatically disappears.

The same practice holds for those records which have been made on six- and fifteen-mile courses, which under the new rules have been discontinued. These records will be dropped with the other 1929 records after 1930.

In connection with the change from what have been known as American records to world records, the Commission felt that our records were just as much entitled to be known as world records as those which are passed upon only once a year by the International Yachting Union. As a matter of fact European regulations are considerably different from ours and in reality are less stringent inasmuch as they permit larger piston displacement in the several classes, impose no restrictions on hulls as to weight, nor make any provision for the inspection of motors. In view of these and other differences in the requirements it was decided that in the future our records would be known as world records since, being made in conformity with all these restrictions, our records really represent more than what the European speeds do.

RIVERVIEW CLUB ORGANIZED

A new outboard racing club has just come into existence on the Delaware River. It is called the Riverview Outboard Club, which has selected for its headquarters a beautiful site on the Rancocas Creek, where a fine club-house is available, and shortly it hopes to become one of the most active racing bodies of the section.

Membership of boating enthusiasts, both male and female, is being increased rapidly from a nucleus of 20 members when organized. A special section for the feminine outboard drivers will be formed, and the club will feature women drivers in all of the events it plans to hold.

The headquarters on the Rancocas will be between Bridgeboro and Centerton, N. J. Good water conditions exist between the club and the Delaware. The creek is particularly wide at that point, and it will be possible to hold races in front of the club for outboards and other classes.

Joe O'Neill, owner of the outboard Sandot, prominent on the Delaware, was elected the first commodore. He is very popular and foresees a big career for the new club. Other officers elected were: Harold Smith, vice commodore; Paul Horident, rear commodore; Joseph Hough, secretary and treasurer; and Wally Shea, recording secretary.

The club has made application for membership in the Middle Atlantic Outboard Association. It is planning a picnic for later in the summer, as well as a series of late outboard races.

YARD AND SHOP

(*Continued from page* 146)

EQUIPMENT FOR DEEP-SEA ANGLING

All fishermen, regardless of the type of fishing of which they are devotees, realize the important part which proper equipment plays in the successful pursuit of their favorite sport. The larger game fish, in particular, just refuse to be hauled in by strong-arm tactics, nor is there any sportsmanship in that sort of fishing. The ethics of the game demand that the weight of tackle be reduced to an absolute minimum to put the fighting fish on an equal footing with the angler. When the weight of a rod is measured in ounces for handling a fish that tips the scales at hundreds of pounds, those few ounces must be perfectly distributed, delicately balanced and selected from the choicest of stock.

Some of the finest salt-water rods produced in this country are the work of H. W. Major, specialist in the manufacture of high-grade salt water fishing equipment. His present work has come about as an evolution from a hobby, which was always deep-sea fishing. Knowing the exacting requirements in the fashioning of a well-proportioned rod, Mr. Major started originally by making his own rods, in order that he might work into them that balance, taper, weight and flexibility which a perfect rod demanded. Expert anglers soon noticed the superiority of Mr. Major's equipment and friends requested that he fashion rods for them. In these special jobs for his friends was the beginning of his present business. Before long it became necessary to drop his regular line of work and devote all of his time to the making of rods. Last fall Mr. Major came east from California and opened an office in New York at 155 Chambers Street, in order to be nearer the sources of supply of the best wood that this country produces.

Mr. Major specializes in rods made of select hickory, the toughness and flexibility of which make it ideally suited to the purpose. Every tree which supplies the material for a rod is individually selected by Mr. Major who has made a careful study of the dozen or more varieties found in this country. Some of these species are perfectly adapted to the purpose of rod making, others have comparatively little value. Accurate instruments test their flexibility, strength and moisture content. From this choice stock, every rod is hand fashioned and is given the attention it would receive were it intended for Mr. Major's personal use. The taper of the stick and placement of guides receive careful attention and the rod is treated with a special aluminum preparation developed by the maker, which renders it impervious to the effects of salt air and salt water.

Another of Mr. Major's specialties is a swivel fishing chair made for deep-sea angling constructed of the same select hickory and Hyde manganese bronze. The chair is designed to be screwed into a deck plate, making it readily removable without tools and leaving the deck flush and unobstructed when the chair is not in use. Backs are detachable and bronze sockets are provided for holding the butt of the rod, adapted either to straight or tapered butts. Each of these chairs is painstakingly made by hand and while they are really handsome pieces of deck furniture, they are primarily designed for strength and utility and are almost indispensable for deep-sea angling.

DIESEL ECONOMY

Persons contemplating the installation of a new motor in their pleasure or work boat should not fail to secure a copy of the new circular prepared by the Hill-Diesel Engine Company, 260 Mill Street, Lansing, Michigan. This circular illustrates and describes their two types of diesel engines—the 5 by 7-inch type and the 6 by 10-inch model. Hill-Diesels are available in 1, 2, 3, 4 and 6-cylinder models with horsepower ratings ranging from 10 to 120 horsepower. A brief description of the many improvements and engineering refinements which Hill-Diesels embody in their construction will be found in the circular and one is also able to get a good idea of the space required for installation on each of the models. The Hill-Diesel Engine Company will be glad to mail a copy of this circular to anyone who will write them at the above address.

A CORRECTION

On page 33 of our July number in the article on the Fifteenth America's Cup Match, we had occasion to refer to the defending yacht in the year 1876. In the article the name of the yacht was incorrectly spelled Madeline and the name of the owner was also incorrectly referred to as John S. Dickinson. A grandson of the owner, Harold Dickerson, has kindly called to our attention the fact that we were in error in the spelling of these two names and we wish to take this opportunity to correct them. The name of the yacht is properly spelled Madeleine and the owner's name John S. Dickerson.

RUNABOUT SERVES BYRD PARTY

Another instance of the way in which the modern pleasure speedboat is able to serve not only our heroes but also the political heads of our Government was revealed in New York's recent reception of Rear Admiral Byrd upon his return from the Antarctic. At this time, Arthur J. Utz, manager of the New York branch of the Gar Wood organization offered his services to the Byrd party and took one of the model 28-40 Gar Wood runabouts down to New York harbor and put the craft at the disposal of Rear Admiral Byrd for his use in any manner which might serve him best.

Members of the Antarctic crew found the runabout a great convenience in running back and forth comfortably and rapidly between the ships City of New York and Eleanor Bolling. A Virginia delegation also flew up in a U. S. Navy Sikorsky amphibian from Anacostia and upon alighting was greeted by the extension of a similar courtesy of the use of the runabout for passenger service. The party got aboard and was quickly transported to the City of New York where Byrd received a warm welcome from his Virginia friends. Among the party were Mr. Shirley, Col. Wilbur Newbill, assistant adjutant general, Richmond, Virginia; Nelson Page, a judge of Winchester, Virginia; and Kit Carson of Riverton, Virginia. After a pleasant visit aboard the City of New York they completed their welcome by running up the harbor, circling the Macon twice, inspecting the Eleanor Bolling and finally returning to the amphibian which then took off for Virginia.

Billy Arnold and Sir W. Douglas Hawkes, American and English auto racing champions, aboard Arnold's 26-foot Hacker runabout

THE AROUND MANHATTAN RACE

Thirty-six outboard boats attempted the hazardous journey around Manhattan Island on the afternoon of June 29. As is usual in this contest the greater part of the contestants came to grief due to the drift-wood encountered on the run. Harold Chapman, driving Big Ben, was successful in winning the Herbert Pulitzer Trophy for the second time, making the journey in practically the same time as he did in the previous year. A summary of the drivers who completed the run and their times follows:

Driver	*Biat*	*Time*
H. Chapman	Big Ben	58.45
Willis Overton	Saugatuck II	59.
Fred Jacoby, Jr.	Miss Julia II	1.04.50
Ted Roberts	Phantom II	1.05.24
J. H. Telfair, Jr.	Flying Fish 8	1.07.05
J. F. Hitchcock	Okay II	1.08.44
J. Bordonare	Miss Belleville	1.11.35
Leon Rogers		1.19.10
Julius Pelles	Scarlet Gal	1.30
F. Schineller	Flowers Falcon	1.32.20
Edward Hett	Acme	1.45.40
Victor Temple	Hell Diver	1.47.35
Reece Hatchitt	Lucky	1.53
E. Ruperich	Keydet IV	1.51.55
W. W. Stanton	Humbug	1.59.10
Charles Ligh		2.08
E. H. Patterson	Miss Shirt II	2.14.30

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Volume X

The Outboard Motor Boat Book

Plans, Specifications and Building Instructions for Over 30 Craft of Various Types and Sizes Suitable for Powering with Outboard Motors

THIS is the book which everyone has been waiting for. The scope of the craft, plans, specifications and building instructions of which are printed in this volume, is very broad. Everything is included from the smallest rowing dinghy suitable for a Class A Outboard Motor up to the fastest Class C racing hydroplanes. Plans of some of the outboard racing boats which have established world's records are included. All of the boats are easy for the amateur or novice to build. If you wish to use the boat on the seaboard or inland waters or on some lake or smaller body of water you will find a design which is suitable. If you are partial to sail and use the outboard as an auxiliary to get home with should the wind fail, you will find a number of designs of these boats, too. The plans and designs are particularly clear and easy to understand and no previous knowledge of boat building is necessary to turn out a successful boat. You should not fail to have a copy of this book.

THE CONTENTS OF VOLUME X

RINKY-DINK, A 7-FOOT PRAM
A useful little dinghy for carrying one or two persons' between the shore and the larger boat.

PIRATE, A MODEL SLOOP
A complete design for constructing an excellent little model sailing sloop which can compete in model races.

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An easily built little flat bottom speedster suitable for outboard engines in the smaller sizes, which will produce speeds up to about thirty miles.

HANDY-ANDY, A SAILING DINGHY
A simple little round bottom design fitted with a single sail which will furnish ideal sport for the skipper who is spending spare time while his larger vessel is at anchor.

JAN, A SAILING SKIFF
A ten-foot flat bottom design which will serve equally well as a dinghy, sailboat and outboard engine tender.

CARRYME, A UTILITY DINK
A useful little flat bottom dinghy which is easy to build and which will carry from three to four persons.

APPLE SAUCE, A FAST LITTLE SPEEDSTER
A simple little design for a fast outboard racer, which will do over thirty miles per hour with a suitable engine.

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An excellent design for a 10-foot row boat arranged to carry three or four people and which can be used with any of the smaller outboard engines as a boat tender.

NYMPH, A 10-FOOT SAILING DINGHY
An attractive little boat fitted with a large sail and center board which will enable it to sail very nicely and which is also arranged to handle an outboard engine.

A 12-FOOT DINGHY
A first class design for a slightly larger outboard engine tender capable of carrying four persons.

JAZZ BUG, 12-FOOT HYDROPLANE
A fast little hydroplane which will handle engines of class B and with which it should do thirty miles.

SMARTY, A UTILITY BOAT
A 14-foot flat bottom dinghy arranged to handle under sail or under power of an outboard engine. Should be able to carry at least six people.

BUSTER, A 12-FOOT SAILING DINGHY
A round bottom dinghy of somewhat larger size, arranged for both sail and outboard engines.

SNAPPER, A SAILING DINGHY
A smart little round bottom tender, which can be used for much useful service in pleasure or work.

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A roomy round bottom sailing skiff with a dagger type centerboard and a large main sail. Will handle nicely under sail and can be used with an outboard engine also.

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A 13-foot V-bottom hydroplane which has performed well in competition. It is designed for the modern fast outboard engine and should do 35 miles per hour quite easily.

DANCER, A 12-FOOT DINGHY
An inexpensive little boat designed particularly as a substantial flat bottom row boat for tender and ferry service.

WHIZ, A BABY HYDROPLANE
A sporty little speedster designed particularly for amateur construction arranged for use with an inboard engine of 20 h.p. with which it will do 30 m.p.h.

BABY STEPPER, A 14-FOOT OUTBOARD PLANE
A well tried and proven little design for a speedy outboard engine racing boat. Will handle engines up to class C with which the highest speeds will be secured.

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A flat bottom dinghy 14 feet in length which will be suitable for tender service and similar work.

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A very able design for a large roomy row boat, capable of carrying a large load in passengers or baggage.

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A design generally similar to that of Pixie but decked over for the greater part of its length so that it is much more sea-worthy and able.

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An excellent little design for a useful little runabout, designed to be driven by an engine of about 10 h.p. with which it will perform very well.

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A broad beamy 15-foot motor skiff arranged for an inboard engine of 5 to 6 h.p. With this it will do 6 to 7 miles per hour and will carry a very heavy load.

EDITH, A HAND 15-FOOTER
A V-bottom design for an attractive little runabout arranged with a small engine in the stern and passenger space forward.

TOTO, AN OUTBOARD RUNABOUT
An inexpensive and easily built 16-foot runabout designed particularly for the modern outboard engine. An able little craft which will carry five persons comfortably.

FLATTIE, A 16-FOOT UTILITY BOAT
A simple little flat bottom skiff designed for a small single cylinder engine, practical for many kinds of service.

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A 16-foot stepless outboard speedster which is easy to build and fast enough for any one who does not care for extreme high speeds.

TRANSCO, AN OUTBOARD RUNABOUT
A sturdy and substantial 16-foot boat, built with lapstrake planking on a round bottom design. This boat will make a very able job for long cruises.

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An excellent design for a 17-foot round bottom boat, suitable for rowing, sailing, or an outboard engine.

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This design follows the typical canoe style of construction and has a square stern which adapts it to the use of an outboard engine. The boat is 17 feet in length and has a beam of 3½ feet.

GOZO, A PETITE SLOOP
A pretty little design for a 16-foot auxiliary sloop arranged for a small inboard engine. The cabin arrangement provides berths for two persons and this little boat will make an excellent cruiser for the young fellows.

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MADISON CELEBRATES THE FOURTH

(*Continued form page* 51)

Johnson motor, achieved 42.056 in Division III of the same class and 44.355 in mile trials. The third record maker was John R. Maypole of River Forest, Ill., whose Ramsey boat, also Johnson powered, caused the clicker to register 41.919 in Division II Class C competition. A pretty burst of speed mighty near a record, was shown by Miss Cincinnati, J. C. Fisher owner and driver, averaging over 60 miles per hour for the 15 miles of the Webb trophy contest, and 65 for some laps, a speed, if some old Ohio river captains should happen to ask, just about 5 times that of the good ol' Robert E. Lee. This race, the Webb trophy, was the high spot of the program. Oh yes, the Valley returned to its first love, or rather loves, the hydros, this year, after a season's devotion to the flapper outboards, and the Old Timers in the boating game heaved great sighs of satisfaction when the swift smooth motion of the inboard hulls replaced the choppy cavortings of the smaller outboard craft. Flappers and outboards are all right in a way, and they have a way, too, but a boat, like a woman, doesn't lose in attraction by the possession of poise, or so the Old Timers say, and the O. T.'s know boats—and women.

But we wander—let's see—what was it? Oh yes, the Webb trophy. Well, the hills that reverberated to the guns of Morgan's men in the raid of July, 1863, gave back the roar of a half dozen mighty motors on Saturday during the two heats of the Valley classic. Spectators were brought to their feet to cheer two spectacular finishes, finishes that resulted in Miss Cincinnati and Hoosier Boy (J. W. Whitlock, Rising Sun, Indiana) winner of the trophy in 1926, tying in points each with one first and one second place, the former wresting the trophy away from her rival by a faster heat.

Commodore Ray B. Lechenger, newly elected president of the Mississippi Valley Power Boat Association

L. J. Muntifer's Catharine III, another Cincinnati entry, ranked third and Pal, a second entry from Rising Sun (surely a boat-minded, if small, village) winner of the coveted cup in 1928 for its owner, Russell Dowers, Miss Fern Creek (E. H. Stout, a bandannaed big boy from Fern Creek, Ky.) and Miss Quincy XI (Carl Green, Dayton, Ohio) were the other contenders. A moment's thought is sufficient to show that with two former holders of the trophy contending, both from the selfsame town, and all contestants Ohio River racers, the rivalry was intense and the outcome of utmost local interest. The excellent time of 14:54, 60.16 m.p.h., for the 15 miles guarantees national interest as well.

The old Ohio scored again in the 725 class hydroplane race won by Catharine III. Seconds only separated the winner from the hotly pursuing Who Cares (W. E. McGregor, Louisville, Ky.) in both heats which as even a luke warm fan must admit, are fairly felicitous finishes. A minute and a few seconds more and Pal romped in third in the first heat but unfortunately did not start in the second, third place there going to Miss Fern Creek. Louisville Kid, owned and driven by H. C. Downes of Louisville, Ky., was the fifth 725 class entry, but did not finish either heat.

(*Continued on page* 186)

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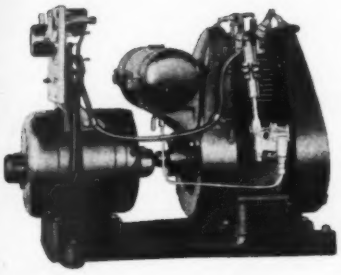

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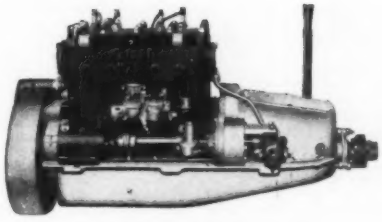

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SUMMARY OF EVENTS
23RD ANNUAL NATIONAL REGATTA, M. V. P. B. ASSOCIATION, MADISON, INDIANA
JULY 4-5, 1930

WORLD'S RECORDS
Approved by National Outboard Commission on July 9, 1930

Outboard Class C, Division I, 5 miles: Jack Smith, Newport, Ky. Johnson motor—Arrow hull.....40.88 M. P. H.
Outboard Class C, Division II, 5 miles: John B. Maypole, River Forest, Ill. Johnson motor—Ramsey hull.....41.919 M. P. H.
Outboard Class C, Division III, 5 miles: George Cost, Birmingham, Ala. Johnson motor—Indian hull.....42,056 M. P. H.
Outboard Class C, Division I, 1 mile: Jack Smith, Newport, Ky. Johnson motor—Arrow hull.....39,793 M. P. H.
Outboard Class C, Division III, 1 mile: George Cost, Birmingham, Ala. Johnson motor—Indian hull.....44,355 M. P. H.

CLASS B, DIVISION I & II—5 MILES

Place	Owner—Address	Heat	Total Time	M.P.H.
1	A Reinking, Indianapolis, Ind.	1st	9.13	32.55
		2nd	8.11	36.61
2	John B. Maypole, River Forest, Ill.	1st	8.52	33.8
		2nd	8.21	35.87
3	Barney J. Gugel, Louisville, Ky.	1st	10.48	27.7
		2nd	11.29	26.10

O. J. Mullenbach, Ravinia, Ill.; Jos. Venezia, Indianapolis, Ind.; Jack Smith, Newport, Ky., also ran.

CLASS B, DIVISION III & IV—5 MILES

Place	Owner—Address	Heat	Total Time	M.P.H.
1	J. C. Fischer, Cincinnati, O.	1st	10.21	28.97
		2nd	8.42	34.30
2	G. A. Willis, Covington, Ky.	1st	9.17	32.31
		2nd	8.49	34.20
3	Gus Schipper, Aurora, Ind.	1st	9.10	32.67
4	George Haslett, New Albany, Ind.	1st		
		2nd	9.00	33.29

B. T. Service, New Albany, Ind.; George Schipper, Aurora, Ind.; R. J. Elder, Dayton, O.; M. R. Brady, Manistee, Mich.; Hub Meyers, Detroit, Mich.; Hilda Mueller, Bay City, Mich.; A. C. Hartle, Columbus, Ohio; Roy Pregener, Antioch, Ill., also ran.

CLASS C, DIVISION I & II—5 MILES

Place	Owner—Address	Heat	Total Time	M.P.H.
1	John B. Maypole, River Forest, Ill.	1st	7.51	41.37
		2nd	7.09	41.91
2	Joe Venezia, Indianapolis, Ind.	1st		
		2nd	7.28	40.50
3	Jack Smith, Newport, Ky.	1st	7.20	40.88
		2nd		
4	D. Thomas, Ludlow, Ky.	1st		
		2nd	7.39	39.18

Edward Browner, Madison, Ind.; O. J. Mullenbach, Ravinia, Ill.; Willie Ellis, New Albany, Ind.; A. Reinking, Indianapolis, Ind.; Dale Miller, Indianapolis, Ind.; J. Barney Gugle, Louisville, Ky.; Mr. Powers, Lafayette, Ind.; Mr. Ellis, Louisville, Ky., also ran.

CLASS C, DIVISION III & IV—5 MILES

Place	Owner—Address	Heat	Total Time	M.P.H.
1	George Cost, Birmingham, Ala.	1st	7.22	40.72
		2nd	7.08	42.05
2	Hilda Mueller, Bay City, Mich.	1st	7.23	40.63
		2nd	7.28	40.16
3	Lew Hewes, Waukegan, Ill.	1st	7.43	38.87
		2nd	7.30	39.96

J. W. Whitlock, Rising Sun, Ind.; J. C. Fischer, Cincinnati, O.; Ed. Leaf, New Albany, Ind.; R. T. Durrett, Louisville, Ky.; Gus Schipper, Aurora, Ind.; George Schipper, Aurora, Ind.; R. J. Elder, Dayton, O.; A. F. Berry, Newport, Ky.; J. C. Bennett, Louisville, Ky.; M. R. Brady, Manistee, Mich.; Hub Meyers, Detroit, Mich.; Jack Bersonette, Fox Lake, Ill.; J. Jacobson, Stockholm, Sweden; T. Esterlich, Washington Park, Ill.; Edward Bronner, Madison, Ind.; John Maypole, River Forrest, Ill., also ran.

CLASS D, E, F, G, DIVISION III & IV—10 MILES

Place	Owner—Address	Heat	Total Time	M.P.H.
1	George Cost, Birmingham, Ala.	1st	13.59	42.87
		2nd		
2	Hub Meyers, Detroit, Mich.	1st	14.33	41.20
		2nd	16.39	36.02
3	Ed. Leaf, New Albany, Ind.	1st	14.36	41.06
		2nd	18.01	33.27
4	John Brown, Louisville, Ky.	1st		
		2nd	17.16	34.72

Jack Bersonette, Fox Lake, Ill.; Ray Preganzer, Antioch, Ill.; J. W. Whitlock, Rising Sun, Ind.; J. C. Fisher, Cincinnati, O.; Eldon Travis, Peoria, Ill.; M. R. Brady, Manistee, Mich.; Hilda Mueller, Bay City, Mich.; James Shueler, Aurora, Ind.; Robert Hart, Louisville, Ky.; Fred Johnson, Lexington, Ky.; Carl Leeth, Culman, Ala.; Gus Schipper, Aurora, Ind.; George Schipper, Aurora, Ind.; M. Mennen, Jeffersonville, Ind.; O. J. Mullenbach, Ravinia, Ill.; Ed. Weble, New Albany, Ind., also ran.

CLASS D, DIVISION I (Special)—5 MILES, 1 HEAT

Place	Owner—Address	Time	M.P.H.
1	L. E. Mennen, New Albany, Ind.	8.34	34.99
2	John A. Anderson, Chicago, Ill.	9.27	31.74
3	Fred Johnson, Jr., Lexington, Ky.	D.N.F.	

CLASS 55 H. P. RUNABOUTS—5 MILES, 1 HEAT

Place	Owner—Address	Time	M.P.H.
1	J. W. Whitlock, Rising Sun, Ind.	11.23.5	26.37
2	C. D. Shea, Louisville, Ky.	22.54	13.1

E. R. Norman, Cincinnati, finished ahead but disqualified for having power in excess of class requirement.

O. H. Dolson, Louisville; Clayton Leschkge, Aurora, Ind., also entered.

CLASS 135 H. P. RUNABOUTS—5 MILES, 1 HEAT

Place	Owner—Address	Time	M.P.H.
1	R. H. Hermann, Cincinnati, O.	10.25	28.80
2	E. C. Thirlwell, Louisville, Ky.	10.34	28.39
3	E. F. Johnson, Cincinnati, O.	13.08	22.85
4	F. J. Miller, Southgate, Ky.	18.08	16.54

W. A. Combs, Lexington, Ky.; C. R. Mechle, Cincinnati, O.; H. Edwards, Lexington, Ky.; Charles Downing, Aurora; C. Leschkge, Aurora, Ind., also entered.

CLASS 200 H. P. RUNABOUTS—5 MILES, 1 HEAT

Place	Owner—Address	Time	M.P.H.
1	R. H. Hermann, Cincinnati, O.	9.52	30.28
2	E. C. Thirlwell, Louisville, Ky.	10.43	27.95
3	H. L. Douglas, Lexington, Ky.	11.04	27.10

CLASS CRUISER FREE-FOR-ALL—5 MILES, 1 HEAT

Place	Owner—Address	Time	M.P.H.
1	Ed. McHugh, Cincinnati, O.	25.335	11.72
2	T. L. Barrett, Louisville, Ky.	27.46	10.86
3	Ohio River M. B. C., Cincinnati, O.	31.03	9.65
4	C. B. Stansberry, Louisville	31.29	9.54
5	W. E. Gregory, Louisville, Ky.	D.N.F.	

CLASS 151 HYDRO LIMITED—DISTANCE 5 MILES, 2 ROUNDS

Points	Name of Boat & Owner	Heat	1st Rd.	2nd Rd.	Elapsed Time	M.P.H.
400	EMPIRE STATE	1	4.004	3.336	7.340	39.60
	C. M. Hall, Jamestown, N. Y.	2	3.285	3.312	6.597	42.867
200	MARY JANE	1	4.037	3.349	7.386	39.25
	C. B. Stebleton, Dayton, O.	2	3.303	3.298	7.001	42.84
100	GOLDEN ROD	1	4.008	3.334	7.342	39.63
	A. Long, Louisville, Ky.	2	3.331	3.312	7.043	42.422
	MISS DANVILLE	1	4.256	3.560	8.216	35.884
	C. F. Carter, Danville, Ill.	2	3.458	3.449	7.307	39.938

Miss Quincy XI, Carl Green, Dayton, Ohio; My Buddy, Charles Scott, Louisville, Ky.; It, J. L. Brown, Houston, Texas; Bat II, Charles Cicennet, Louisville, Ky.; Spirit of Peoria, Eldon Travis, Peoria, Ill.; John, J. H. Brown, Jr., Louisville, Ky.; Teal, J. O. Anderson, Chicago; Rip, O. B. Hill, Ann Arbor, Mich., also ran.

CLASS 151 HYDRO UNLIMITED—DISTANCE 10 MILES, 4 ROUNDS

Points	Name of Boat and Owner	Heat	1st Rd.	2nd Rd.	3rd Rd.	4th Rd.	Elapsed Time	M.P.H.
400	EMPIRE STATE	1	3.130	3.012	3.050	3.031	12.22	48.49
	C. M. Hall, Jamestown, N. Y.	2	3.217	3.404	3.403	3.401	14.225	41.749
100	BABY TARPON	1	3.114	3.308	3.266	3.269	13.157	45.24
	Robt. Ringling, Sarasota, Fla.	2					DNF	
100	GOLDEN ROD	1					DNF	
	Alois Long, Louisville, Ky.	2	3.254	3.452	3.391	3.428	14.325	41.76
75	MARY JANE	1	3.392	3.385	3.405	3.347	14.42	40.77
	Clif. Stebleton, Dayton, Ohio	2	3.404	3.421	3.444	3.469	14.538	40.27
50	OH MY	1	3.289	3.283	3.335	3.408	14.11	42.7
	Ray Preganzer, Antioch, Ill.	2					DNS	
45	MISS QUINCY XI	1	3.559	3.541	3.449	3.572	15.42	38.21
	Carl R. Gren, Dayton, O.	2	3.493	3.520	3.517	3.524	15.264	38.86

CLASS 510 HYDRO—DISTANCE 10 MILES, 4 ROUNDS

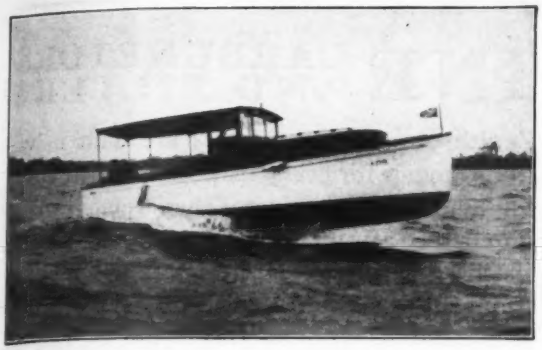
Points	Name of Boat and Owner	Heat	1st Rd.	2nd Rd.	3rd Rd.	4th Rd.	Elapsed Time	M.P.H.
400	LOUISVILLE KID	1					11.50	50.70
	H. C. Downes, Louisville, Ky.	2	2.546	2.554	3.177	2.537	12.01	49.90
125	LADY MARION	1					12.41	47.30
	L. H. Douglass, Lexington, Ky.	2	3.081	3.052	3.066	3.051	12.25	48.12
100	KENTUCK	1					11.52	50.56
	Dick Jones, Louisville, Ky.	2					DNF	
100	MISS FERN CREEK	1					12.07	49.0
	E. H. Stout, Fern Creek, Ky.	2	3.135	3.123	3.138	4.161	13.557	43.08
25	MISS QUINCY XI	1					DNF	
	Carl Green, Dayton, O.	2	3.525	3.437	3.424	3.395	14.58	40.089
20	MARY JANE	1					DNS	
	Clif. Stebleton, Dayton, O.	2	3.522	3.408	3.446	3.495	15.07	39.69
20	GREY GOOSE	1					12.48	46.87
	W. Schneider, Ludlow, Ky.	2					DNS	
	RASCAL	1					DNS	
	R. H. Herman, Cincinnati, O.	2					DNF	

CLASS 725—DISTANCE 10 MILES, 4 ROUNDS

Points	Name of Boat and Owner	Heat	1st Rd.	2nd Rd.	3rd Rd.	4th Rd.	Elapsed Time	M.P.H.
400	CATHERINE III	1	2:33.0	2:33.4	2:35.0	2:36.8	10:18.2	58.23
	L. J. Muntifer, Cincinnati, O.	2	2:38.5	3:17.0	3:18.9	3:33.0	11:57	50.18
200	WHO CARES	1	2:38.8	2:36.6	2:37.0	2:44.2	10:37.6	56.46
	W. E. McGregor, Louisville, Ky.	2	2:50.1	3:29.1	3:00.0	2:50.6	12:09.8	49.32
50	PAL	1	2:44.2	2:41.0	2:54.0	3:05.0	11:24	52.61
	Russell Dowers, Rising Sun, Ind.	2					DNS	
50	MISS FERN CREEK	1					DNF	
	E. H. Stout, Fern Creek, Ky.	2	3:14.0	3:15.3	3:14.7	3:14.8	12:58.8	46.22
	LOUISVILLE KID	1					DNS	
	H. C. Downes, Louisville, Ky.	2					DNF	

CLASS WEBB TROPHY, FREE-FOR-ALL—DISTANCE 15 MILES, 6 ROUNDS

Points	Name of Boat and Owner	Heat	1st Round	2nd Round	3rd Round	4th Round	5th Round	6th Round	Elapsed Time	M.P.H.
300	MISS CINCINNATI	1	2:24.7	2:29.5	2:31.3	2:31.5	2:28.3	2:29.4	14:54.7	60.35
	J. C. Fischer, Cincinnati, O.	2	2:28.6	2:26.6	2:26.4	2:27.0	2:26.8	3:14.4	15:27.28	58.8
300	HOOSIER BOY	1	2:35.8	2:33.3	2:34.6	2:34.0	2:34.0	2:34.6	15:26	58.9
	J. W. Whitlock, Rising Sun, Ind.	2	2:37.0	2:35.5	2:34.5	2:34.8	2:33.3	2:33.5	15:26.24	58.76
10	CATHERINE III	1	2:36.0	2:35.7	2:46.3	2:58.8	2:35.6	2:53.6	16:28	54.66
	L. J. Muntifer, Cincinnati, O.	2	2:36.2	2:34.2	2:33.4	3:34.6	3:20.8	4:30.6	18:10	49.5
25	PAL	1							16.36	54.9
	Russell Dowers, Rising Sun, Ind.	2	DNS						DNS	
	MISS FERN CREEK	1							DNF	
	E. H. Stout, Fern Creek, Ky.	2	DNS						DNS	
20	MISS QUINCY XI	1	3:48.5	3:44.0	3:44.0	3:49.6	3:40.0	3:41.6	22:27	40.09
	Carl Green, Dayton, O.	2	DNS						DNS	



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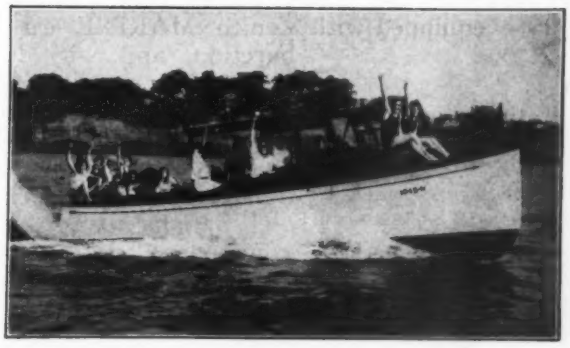

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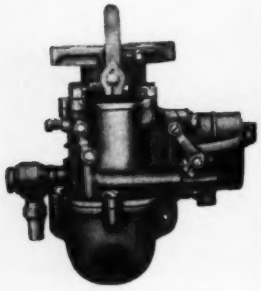

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MADISON CELEBRATES THE FOURTH

(*Continued from page* 182)

However, the Louisville Kid had its innings in the 510 race when it led the field in both heats, thereby securing the indisputable championship of the class. Dick Jones of Louisville, in his Kentuck, ran a close second in the first heat, the speed of the two for the ten miles averaging fifty and a fraction miles per hour, but did not finish the second heat. Lady Marion (L. H. Douglas, Lexington, Ky.) placed second for the class and other entrants included Miss Fern Creek, Miss Quincy XI, Mary Jane (Clifford Stebbleton, Dayton, Ohio) Grey Goose (Willis Schneider, Ludlow, Ky.) and Rascal (Dr. R. H. Hermann, Cincinnati, Ohio). The doughty Dr. Hermann was anxious to try his swift moving runabout against the field of 510-ers but two or three unsuccessful efforts to score down with them soon proved that his craft, Rascal, though it might be, was in too fast company, and couldn't face the rough stuff as the tougher hydros could.

In accordance with the ruling established in 1928, the 151 class, once the pet of the association, was run in two divisions, termed limited and unlimited, the latter permitting superchargers. The East came off victorious in both divisions, Dr. Carroll M. Hall of Jamestown, N. Y. piloting his Empire State to leading place in all four heats. Boats from Texas, Florida, Illinois, Kentucky, Ohio, Indiana and Michigan vied with the New York Stater for the honors, the stiffest competition being furnished by Bob Ringling's Baby Tarpon from Florida. And by the way, the writer, long an enthusiastic rooter for the 151's, and a forecaster of their ultimately overtaking the big fellows, points with pride to the time set up by the Empire State in the unlimited class, an average of 48.49 for the 10 miles, which is but 2.21 m.p.h. below the 510 class winning time, and this 48.49 is a bit below the class record, too. Both the limited and unlimited events furnished close clashes. Baby Tarpon took second place in the unlimited event nosing out Golden Rod (Alois Long, Louisville) by superior heat time. Golden Rod placed third in this and also in the limited class in which Mary Jane ranked second. Additional contestants in both are listed in the summaries, which also give the details of the outboard events.

For the first time in the history of the annual Valley meets the rules outlined by the National Outboard Commission in May, dividing beyond a shadow of a doubt or argument, the sheep from the goats, the amateurs from the professionals, prevailed and the various classes of outboard were run in divisions accordingly. Many figures of prominence in the outboard world were present at the meet, including Miss Hilda Mueller. Driving with skill and nerve, Miss Mueller asks no quarter from her masculine rivals though on casual acquaintance she would seem to be more at home at a debutante tea than at the wheel of a pounding wave-washed racing craft. A second woman driver at the regatta was Miss Mary Norman, whose runabout, named for her, was too high powered to compete fairly with the lighter powered runabouts and too light for competition with the heavy fellows. The 55 h.p. runabout was won by J. W. Whitlock, and the 135 and 200 h.p. events by Dr. Hermann. Further variety was given to the program by a cruiser race of one heat in which Ed McHugh with his Matthews cruiser came out successful against another Matthews and an A C F.

Matchless weather, neither too hot nor too breezy, an ideal course with water conditions par excellence, a capable local committee, the co-operation of war department officials and the government steamer Kankakee and of the coast guard with their cutters, an entire lack of serious trouble, either verbal, by protest argufyin' and such, or actual, such as accidents to men or boats, (only two or three minor upsets occurred) all combined to make the Madison regatta memorable. The 2½ mile oval course was laid off the center part of the town, encircled by Indiana and Kentucky hills which at this point on the Ohio rise to a scale of magnificence. Several grandstands had been erected on the fairly steeply sloping bank which, of itself, formed a natural amphitheater. Barges and docks for the boats were near enough to be visible and sources of interest to the grandstand and officials worked on a barge moored in center stream with telephone communication to the little booths on shore where the electric timing apparatus and timing committee were housed. The races were conducted according to the rules of the M.V.P.B.A. which include division into classes by piston displacement, championships and trophies awarded according to a carefully worked out system of points and cash prizes given on the basis of every heat a race. These trophies and cups which had been on display in the store windows prior to the meet were, together with the cash prizes, given out by the officials at a meeting on Saturday eve-

(*Continued on page* 192)

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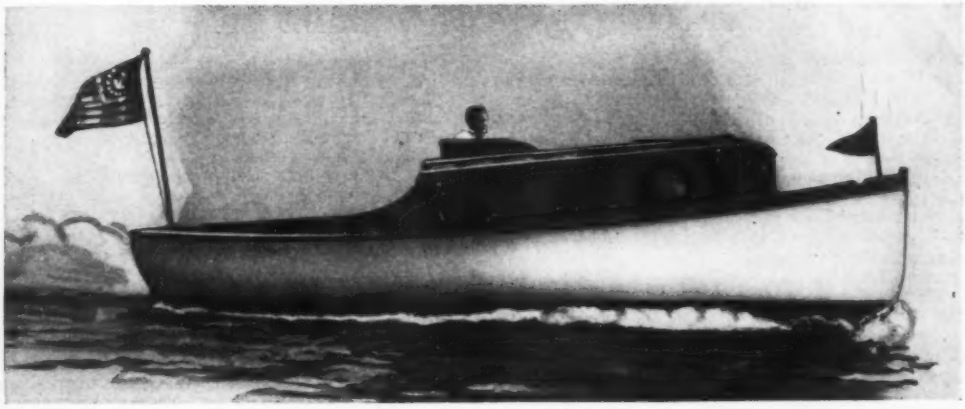

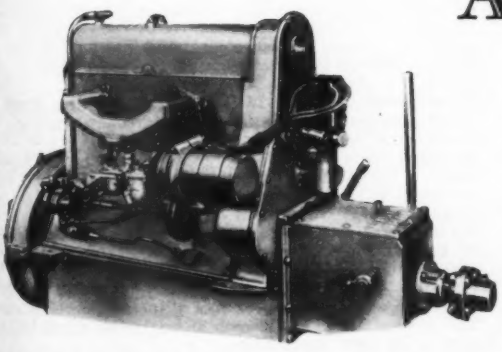

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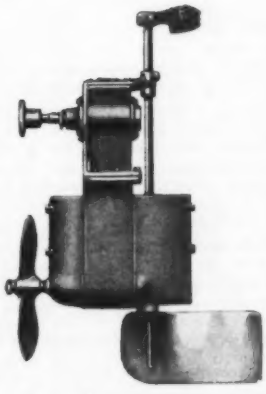

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MoToR BoatinG's Ideal Series

Volume VII

Build a Boat

Plans and Blue Prints of Twenty-five Practical Runabouts, Cruisers, Hydroplanes, Auxiliaries and Dinghies

By John L. Hacker, N. A., Charles D. Mower, N. A., and Others

America's foremost designers of small and practical motor craft

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THE CONTENTS OF VOLUME VII

A Twelve Foot Dinghy
A practical little boat which will be useful as a tender to the larger boat and suitable for a small outboard engine.

Buster, a 12-Foot Sailing Dinghy
A neat little round bottom dinghy with a centerboard suitable for sailing or for use with an outboard engine. It will carry five persons and is a very attractive craft.

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A larger flat bottom dinghy arranged to handle a sail or a small outboard engine as a tender or pleasure boat.

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An attractive little 14 foot runabout arranged to carry four people and fitted with a small single cylinder engine. A substantial little craft and very able for its size.

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A slightly larger runabout which will travel up to 30 m.p.h. with a suitable engine and will carry two persons.

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This boat was designed particularly for engines of the 151 cu. in. class. It is 17 feet in length and will travel up to forty miles per hour.

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A design for a serviceable little boat, almost 17 feet in length. It is intended for moderate speeds and low power and is in effect a slightly larger edition of Marybelle.

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The design for this boat was particularly prepared following many requests for a boat of this size. It is one of the most popular and desirable small boats in our entire collection. A suitable engine is able to drive this little boat from 25 to 30 m.p.h.

Imp, a Smart Runabout
This boat is similar to Flapper and is intended for engines of about 30 h.p. and will travel very nicely with engines of this size. It will carry five persons very readily and is a good looking and seaworthy little boat.

Frances, an 18-Foot Cat Boat
An excellent design for a cat boat which is particularly adapted to class racing in clubs and associations. She is fitted with a centerboard and Marconi sail.

Gladys, a Snappy 20-Foot Runabout
The most popular design for a 20-foot runabout ever published. This design is a fast boat with proper power and will accommodate engines up to 35 or 40 h.p. The boat is arranged to carry five persons comfortably.

Grace, a Popular Cape Cod Cat
Another sail boat of somewhat different style is the cat boat Grace. She is just under 21 feet long and 9 feet 3 inches wide. She follows the typical cat boat lines with a large centerboard and rudder as well as the low cabin house. She makes an excellent boat for day sailing on such waters as Great South Bay and similar bodies.

Priscilla, a High Speed Monoplane
The fast boat enthusiasts have been well pleased with the design for Priscilla, a 21½-foot monoplane. This boat is capable of speeds up to 41 m.p.h. with 100 h.p.

Miss Victory, a High Speed Hydroplane
A particularly fast design for a hydrolane 22 feet in length. It was based on the design of famous western boats which defeated all comers. With an engine of light weight and about 300 h.p. capacity, this boat will deliver a mile a minute speed.

Suzette, a 22-Foot Utility Runabout
This design is for a serviceable utility boat which is fast and able. It is designed to carry five or six persons together with a load of luggage. It is a more substantial boat than the smaller ones and has a good turn of speed and ability to stand heavier weather.

Fleetfoot, a Fast Runabout
An excellent design for a 22-foot runabout of greater speed possibilities. It is a lighter boat and is good for speeds up to 30 m.p.h. with a suitable engine. The boat is arranged to carry four persons, in a single cockpit.

Charlatan, a Shallow Draft Runabout
Designed particularly for places where the water is spread out very thin, this shallow draft runabout will make an excellent craft for such conditions. It will run in 12 inches of water and carry quite a number of people.

Chiquita, a Fast Knockabout
As these designs get larger, the boats are naturally more substantial and able. The knockabout described is arranged for a substantial engine of 50 h.p. which is protected by a small shelter cabin amidships. This boat is fast and has an extensive cruising radius.

Dolores, an Auxiliary Knockabout
An able little sea boat, 24 feet in length with a beam of 7 feet provided with a substantial Marconi sloop rig.

Whitecap, a Special Runabout
A design for a small double cockpit runabout 25 feet in length. Designed particularly for the six-cylinder style engine it will do well over 23 m.p.h.

Ponset, a Nifty Cruiser
An attractive round bottom cruiser, 25 feet in length and of the raised deck type. It is a comfortable little ship with berths for four and a galley and lockers.

Miss A. P. B. A., a Speedy Runabout
A fast boat in the vee bottom displacement boat class. She is good for 40 m.p.h. with an engine of about 125 h.p.

Irene, a 28-Foot Speedabout
This boat is a most substantial and able craft. She was designed to carry five or six people at a good rate of speed and will make about 30 miles with 125 h.p.

Margie, a 31-Foot Cruiser
An attractive cruising design of moderate speed. The boat is of the vee bottom raised deck type with sleeping accommodations for five.

Ruth, a Smart Fisherman's Cruiser
An able cruiser of the trunk cabin type 33 feet in length with a beam of nine feet. This boat has berths for five in its interior arrangements.

Florence, a Double Cabin Cruiser
A most substantial cruiser is the 37-foot vee bottom craft Florence. It has a forward and after cabin of the trunk cabin style with the engine placed under the cockpit floor.

Price of Build a Boat, Volume VII, Ideal Series **$3.00**

Foreign Postage 50 Cents Extra

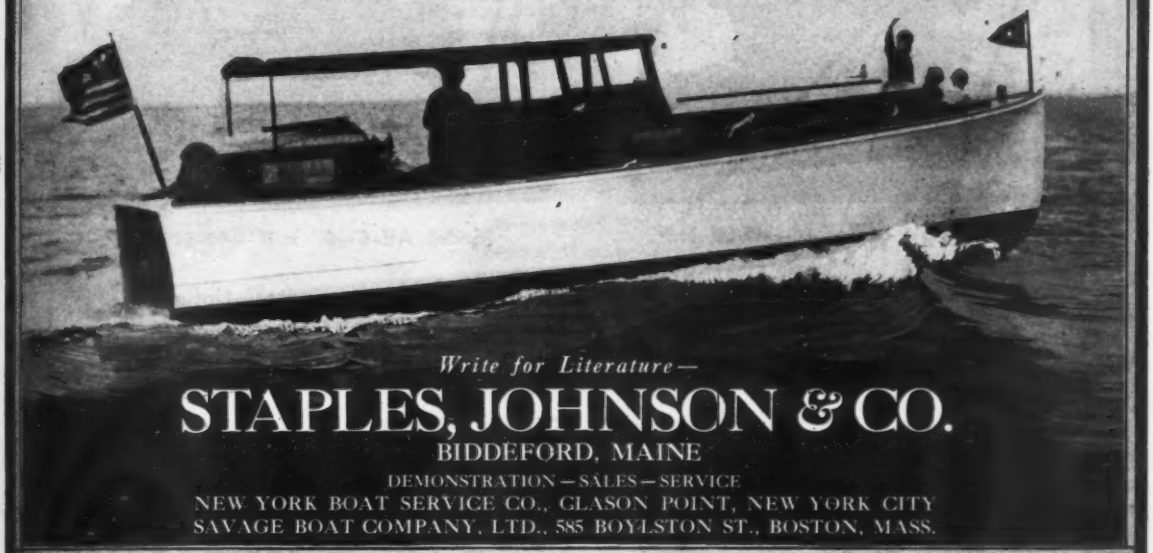
MoToR BoatinG, FIFTY SEVENTH ST. AT EIGHTH AVE., NEW YORK, N. Y.

Advertising index will be found on 3rd last page

MARBLEHEAD 34

(DOUBLE CABIN MODEL)

100 H.P. Kermath - Speed 17 miles



Write for Literature—

STAPLES, JOHNSON & CO.

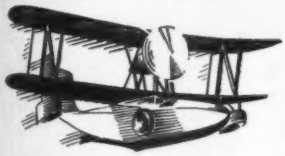
BIDDEFORD, MAINE

DEMONSTRATION — SALES — SERVICE

NEW YORK BOAT SERVICE CO., GLASON POINT, NEW YORK CITY

SAVAGE BOAT COMPANY, LTD., 585 BOYLSTON ST., BOSTON, MASS.

"IT COSTS LESS TO BUILD BETTER BOATS IN MAINE"



Just the Ship for Yachtsmen

KEYSTONE-LOENING AMPHIBIAN

COMMUTER

At home on land, in water or air. Closed cabin carries four, safely and comfortably, at a mile and a half a minute. Write for detailed fully illustrated literature to Dept. C-53.

CURTISS-WRIGHT CORPORATION

Sales Division 27 West 57th Street, New York

Is Your Boat For Sale?

YOU can find a buyer for your boat quickly and at the price you want by using MoToR BoatinG's Market Place. MoToR BoatinG is read by many thousand more boating enthusiasts than any other boating magazine. For Sale advertisements in MoToR BoatinG's Market Place usually find a buyer —and that is what you want. Advertise your boat in the September MoToR BoatinG, forms close August 5th.

MoToR BoatinG

57th Street at Eighth Avenue, New York, N. Y.

YOU MAY HAVE BEEN LUCKY SO FAR!

But unless a Jones Mechanical Fuel Pump feeds the engine of your boat you are sooner or later liable to have some unpleasant hours of drifting.

Wise boat owners who depend on a Jones Fuel Pump never need worry at all. Even if you have some other means of fuel supply, play safe and attach a Jones Fuel Pump as an auxiliary for emergencies. A few dollars and a few minutes does it. None other like it made.

Absolutely dependable—won't flood—runs only when engine runs—never corrodes —minimizes fire hazard. Anyone can attach it to any engine. Get one now and be safe. Profitable dealer opportunity.

JONES MOTROLA SALES COMPANY

DEPT. P. 370 GERARD AVENUE NEW YORK, N. Y.

ARTISTIC STEEL FLOATS

Of striking beauty and staunch construction these Artistic Steel Floats are designed for use as permanent moorings. They may be constructed in any size and anchored in any harbor.

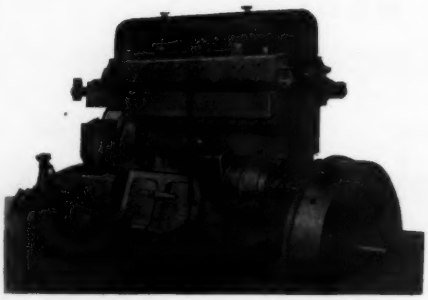
WALSH-BUGBEE COMPANY, INC.

Marine Construction Engineers

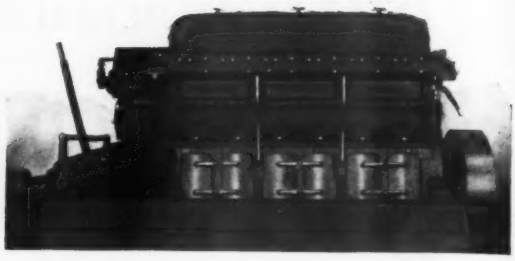
NEW YORK CITY
4 West 56th Street
Telephone: Circle 4653

FACTORY OFFICE
206 East Hanover St., Trenton, N. J.
Telephone: Trenton 6257-8

"Standard" Diesel Marine Engines



Model AE-4—6" x 8"—40-60 H.P.



Model AE-6—6" x 8"—90-100 H.P.

Ideal for boats of 40′ and up — Single or twin installations.

Powerful, Simple, Smooth, Safe and Economical

Both priced surprisingly low.

STANDARD Motor Construction Company

178 Whiton Street **Jersey City, N. J.**

KING SEA SKIFFS
Down the Inside Route to Florida
The southern cruise in a King Sea Skiff is one round of delightful days and nights at sea. Each boat is built for any sea—any weather, and gives maximum comfort at minimum upkeep.
Visit our plant—see how these famous boats are built—take a ride with us—no obligation on your part—
With the finest of workmanship, lap-strake construction, all copper and brass fastenings, ribs of steam bent white oak, heavy spruce bottoms and all mahogany trim, this cruiser stands alone in value and performance.
VISIT THE
KING BOAT WORKS
Originators of Fast Sea Skiffs
HIGHLANDS NEW JERSEY
REGAL QUALITY

PERKO
PATENTED AND OTHER PATENTS PENDING
WARNING
Imitations of our popular "PERKO" Rebulbing Feature for Streamline Running Lights, and our "Perko" Electric Pole Lights and Front Door Lamps are appearing on the market. These unlicensed reproductions infringe upon our patent rights which we shall vigorously uphold. Jobbers, dealers, boat builders and yachtsmen are cautioned to insist upon lights stamped with the name "PERKO" — you take no chances with this line.
Write for a No. 48—68 page catalog and a new No. 49—28 page now being printed.
Perkins Marine Lamp Corp.
1946 Pitkin Ave., Brooklyn, N.Y.
(See Next Month's Announcement of New Designs)

Advertising index will be found on 3rd last page

W-C Tells it's A.A. what we have been telling you

WILCOX, CRITTENDEN & CO.
INCORPORATED
MARINE, HEAVY AND AWNING HARDWARE
HOT GALVANIZING A SPECIALTY
MIDDLETOWN, CONN.

IN YOUR REPLY REFER TO

1845

Wm. B. Remington, Inc.
Springfield, Mass.

July 10, 1930

Gentlemen: RE: Motor Boating

In checking over advertising results for the first six months of 1930, I was very gratified to note the showing made by one of the publications on our list - Motor Boating - and know that you, as our advertising agency, will be interested.

During the five months of February, March, April, May and June in which we used six pages in this publication we received a total of 1302 direct inquiries.

In my estimation this showing is remarkable for a number of reasons. In the first place, the campaign in Motor Boating was not designed to pull direct inquiries and, as you know, only three of the advertisements had coupons attached for the convenience of readers. In the second place, our products do not have the appeal of novelty since W-C Fittings have been well and favorably know in boating circles for so many years. And, moreover, this response would indicate that Motor Boating is thoroughly read by boat owners all over the country.

In view of what you have told us about the cost of inquiries as cited by several publications, it would seem to me that our cost per inquiry from Motor Boating - less than one dollar each - is exceptional.

Yours very truly,
WILCOX, CRITTENDEN & CO., INC.

General Manager.

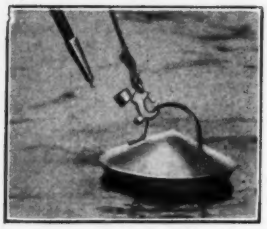
TRADE MARK

GUARANTEE: THE SELLER AGREES TO REPLACE ANY OF ITS PRODUCT FOUND DEFECTIVE IN MATERIAL OR MANUFACTURE BUT WILL NOT PAY ANY CLAIM FOR LABOR ON SAME OR FOR DAMAGES INCURRED BY REASON OF ITS USE

1302

MoToR BoatinG not only has the largest net paid circulation in the boating field, but most important of all it is *thoroughly read*. Not alone the editorial pages, but the advertising pages, too, are *combed* for news as well as buying information. That is why the advertising of Wilcox-Crittenden & Company in MoToR BoatinG continues to stimulate new sales interest for W-C products even though the company has a world-wide reputation of 83 years standing.

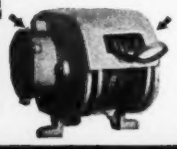
Direct Inquiries from MoToR BoatinG



Patent Applied For

Sturges Jiffy Mooring Snap

There is no longer any excuse for missing a mooring, falling overboard, or losing a boat hook. With the Sturges Jiffy Mooring Snap you can affix line to your mooring without leaving the operating position. The Jiffy Snap is easily fitted to one end of a boat hook by means of a ferrule, and is attached to the bitt with a temporary mooring line. With the line extended along the deck to the wheel, moorings are easily made single-handed, simply by hooking the Jiffy Snap on the ring of the mooring buoy and releasing the pole with a jerk. Ideal for outboard boats. Indispensable aboard sail boats.



Spring Control Box

STURGES EQUIPMENT
Simplifies Boat Handling

BREAKING and weighing the anchor are easy operations with the aid of the Sturges Anchor Hoist. Simple and durable in construction, easily installed and operated, the Sturges Anchor Hoist lifts the anchor clear of the bow, where swinging flukes cannot dig into the planking, and mud can be washed off before the anchor is brought inboard. For short stops, anchoring with the light service line is usually sufficient, without bothering to get out your heavy anchor line. Davit may be unshipped and windlass used separately for kedging off sand bar or for hauling out. Windlass may also be unshipped when not in use, leaving only combination base and mooring bitt on deck.

Substantially constructed, heavily galvanized, the Sturges Anchor Hoist is made in three sizes for any size anchor up to 100 lbs. Furnished entirely of brass at slight additional cost.

Special hoists for outboard motors and boats with capacities up to 400 pounds.

Sturges Dinghy Line Control

With this efficient device fouling of the dinghy line around the propeller in reversing or manoeuvering is an impossibility. Slack in line is automatically taken up on a spring-operated drum and kept where it belongs—on deck instead of loose under the stern.

Davit unships here.
Carrying handle.
Windlass unships here.
Combination base, including bitt.
Rope is easily applied in open type block.

Patent Applied For

Sturges Anchor Hoist

Model No. 2 with 3 speed transmission for anchors 50 to 85 lbs. Low speed gives powerful leverage for breaking the anchor loose from mud bottom. Second speed (on which the handle is shown) is normally used for hoisting the anchor. High speed on main shaft is for quickly reeling in the line slack. Also has powerful brake for lowering anchor into water.

STURGES ANCHOR HOIST
3 Kensington Road, Bronxville, N. Y.

MADISON CELEBRATES THE FOURTH

(*Continued from page* 186)

ning in the huge warehouse adjacent to the course, which had been used as official headquarters and to house a miniature boat show, an innovation at Valley meets.

The Rotary and Kiwanis clubs and the Power Boat Association of Madison had combined to stage the regatta with J. Graham Ross as general chairman, George G. Hall, secretary, and following committee of men prominent in the business and professional life of the little city: R. A. Yunkers, M. F. Pennis, R. O. Beck, Harry E. Wells, C. E. Denny, Richard Jones, and Capt. A. A. Barhard, U.S.C.G. These men played hosts cordially and conscientiously, Dr. Denny extending the hospitality of his Hillside Hotel for a stag buffet supper for all race men and officials.

Officials of the M.V.P.B.A. who were responsible for the smooth operation of the races were President Gordon C. Gillies, general chairman, who doubled in brass, as it were, and showed himself to be a regular Graham McNamee the second, as a radio announcer, keeping the grandstands informed as to the exact happenings on the course; Ray B. Lechenger, Houston Texas, and George Hoehn, Chicago, both National Commissioners, and in charge of all outboard affairs; Philip Becker, Peoria, starter, and E. R. Gray, Marietta, Ohio, assistant; James P. Lacey, Peoria referee; Victor Showalton, Ray Levey, and E. B. Jacobsen, all of Elgin, in charge of timing; Rox Cowley, Pensacola, A. T. Griffith, Peoria, Armin Tissot, Newport, Ky., in charge of scoring; and R. H. Daniels, Peoria, and Leroy Cook, Chicago, in charge of fields. Coast guard cutters acted as course patrols.

Another feature of interest at the two day meet was the annual convention and election of officers of the M.V.P.B.A. held Friday evening at the headquarters. Reports showed the organization to be in splendid condition, adding constantly to its already large roster of clubs and already in receipt of three invitations for the 1931 regatta, from Memphis, Tenn., Houston, Texas, and Harbor Springs, Michigan. The election of officers resulted in the popular Ray B. Lechenger of Houston being elected as a successor to President Gordon Gillies who at Madison brought to a close a most successful two year term, being one of the few men chosen to succeed himself as president in the life of the organization. The new president first came to prominence in M.V.P.B.A. affairs when the annual regatta was given such a royal setting at Houston several years back, winning high praise for his skillful handling of the field of outboards, up to that time highly obstreperous members of the boat racing family. His election to the board of directors soon followed and during the past year he has served as vice-president of the association and for two years as a member of the National Outboard Commission. He is a leader in boating affairs on the Gulf coast and enters his presidency of the Valley with enthusiasm and with, we suspect, very definite plans for achievement. J. W. Whitlock, long a familiar figure in Valley events, was made vice-president. A. T. Griffith of Peoria, Ill., and R. A. Maples of Clinton, Iowa, were re-elected secretary and treasurer respectively, and the board of directors for the year will be made up of the following men: Rox Cowley, Pensacola, Fla., Carroll M. Hall, Jamestown, N. Y., Dr. J. W. Dixon, Burlington, Iowa, R. H. Daniels, Peoria, Alfred H. Wagg, Palm Beach, and D. W. Campbell, San Diego, California.

And so another regatta has passed from maybe to memory. Madison and motorboats—trundle beds and piston heads, hooked rugs and speed bugs, antics afloat and antiques ashore. Thoughts race ahead and one wonders what will boat racing be when these, the modern craft of today, are the antiquities of tomorrow. Who will pen a Way Back When recalling the leisurely pace of the sixty mile an hour Hoosier Boy or the good old days of 1930. But we tend to become maudlin—let's leave motorboats and Madison.

WHO BUYS THE RUNABOUTS

A recent number of The Chris-Crafter, published by the Chris-Craft organization at Algonac, Michigan, contains some information relative to the big ten distributing points for Chris-Craft runabouts compiled on the basis of the number of boats delivered from Algonac. The relative positions of the various cities varies from time to time but according to the figures in this particular period, New York City, as might be expected, heads the list with the greatest number of deliveries. Boston, Philadelphia and Chicago follow in the order named and Minneapolis, Albany, Detroit, Buffalo, Delavan Lake, (Wisconsin), and Syracuse complete the list of important distribution centers.

Advertising index will be found on 3rd last page

CLEAN . . .

AS A PERFECT TAKE-OFF

In action, a DART boat is easily distinguished by her exceptionally level planing angle. It suggests a fast plane at the instant of take-off.

The prow of a Dart is held low, cutting the water evenly and throwing a flat spray well away from the sides of the boat.

A further identifying mark is a bright silvery arrow mounted along her combing. In a race you will usually find this glistening ensignia well in the front, for Dart boats combine MORE SPEED PER HORSE-POWER with unusual seaworthiness and smooth riding quality. Four models, 30-foot, 26-foot, 22½-foot and the sensational new 18½-foot runabout.

WRITE FOR INTERESTING DESCRIPTIVE PORTFOLIO OF ALL FOUR MODELS

DART BOATS, INCORPORATED
Toledo, Ohio

New York Branch: 152 Madison Ave.

MoToR BoatinG's Ideal Series

Volume V

Piloting, Seamanship and Small Boat Handling

By Charles F. Chapman

A wonderful illustrated course in Piloting, Seamanship and Small Boat Handling, published in complete book form and profusely illustrated with nearly 300 cuts and diagrams

INSTEAD of page after page of dry text matter with only occasional illustrations, this text book of small boat seamanship is composed mainly of pictures, drawings, photographs, charts and diagrams covering every situation and every point, with the purpose of each picture clearly explained by a concise and simple title.

You will find this book more enjoyable and easier to understand than any text book you ever read. You will find it correct and authoritative because it has been prepared by experts with years of boating experience and every necessary reference at hand.

You will find it easy to read and easy to remember because each chapter is reviewed by pertinent questions which reveal your understanding of the lessons.

The preparation of this Course has cost thousands of dollars. These books would easily cost $10.00 each if the work was undertaken for book purposes alone. However, all the material and illustrations were originally prepared for the famous Correspondence Course which appeared in regular issues of MoToR BoatinG. And now you can have this entire Course in permanent form for only $2.00.

THE CONTENTS OF VOLUME V

LESSON No. 1—RULES OF THE ROAD MADE EASY, HINTS ON BOAT HANDLING, PROPER WHISTLE SIGNALS.
This chapter deals particularly with the rules of the road, the duties of privileged vessels, the rights of privileged vessels, what to do when meeting another vessel head on, or obliquely, what to do when backing up or coming out of a slip, the rules of the road applying to sailing vessels, row boats and tow boats.

LESSON No. 2—LIGHTS FOR ALL CLASSES OF BOATS AND HOW TO DISPLAY THEM.
An explanation of the basic rules for motor boat lights. Details of the colors and range of visibility with particulars for the lights on motor boats, auxiliary vessels, steamers, sea-going vessels, sailing vessels, ferry boats, canal boats, pilot vessels, wrecks and special lights for special conditions.

LESSON No. 3—GOVERNMENT NAVIGATION LIGHTS, AIDS TO NAVIGATION, DISTRESS SIGNALS, FOG SIGNALS, DAY MARKS.
Many types of government aids to navigation are provided along the waterways. A description of each of the various kinds is given together with a discussion on the characteristics of the lights as well as the visibility and candle power. Light vessels fulfill a special duty, and descriptions of these are given. Life saving signals, fog signals, special forms of day marks in common use are all described and illustrated.

LESSON No. 4—TYPES AND USES OF BUOYS, VARIOUS TYPES OF SAILING VESSELS
Government buoys are markers of safe routes to follow when traveling by boat. The care used in placing and coloring them makes it necessary for boat users to understand their markings. There are many different kinds and styles of buoys all fully described. The types of sailing vessels frequently met are illustrated and described so that it will be easily possible to distinguish one from another.

LESSON No. 5—EQUIPMENT—THE LEGAL REQUIREMENTS IN ALL CLASSES OF BOATS, GOVERNMENT PUBLICATIONS
Special forms of equipment are required on motor boats of various sizes and this chapter describes and illustrates the various acceptable classes of equipment. Publications of the government which are useful for the boat owner to carry are described and illustrated for the benefit of the boat user.

LESSON No. 6—THE COMPASS.
One of the most useful items for facilitating the handling of the boat. Every owner should know how to read a compass and be entirely familiar with the way in which it is divided. This chapter makes it easy to learn how this is done.

LESSON No. 7—THE COMPASS ERRORS AND HOW TO APPLY THEM.
A difficult subject explained in simple language so that the novice can readily understand the method of applying the usual errors of the compass to his own boat. Illustrative problems are given which clear up this subject.

LESSON No. 8—READING AND INTERPRETING THE CHART. HOW CHARTS ARE MADE AND WHAT TO LOOK FOR ON THEM—MEANING OF THE SYMBOLS AND MARKS.
The most constantly used accessory on a boat is the chart. It is essential that all boat users be familiar with these important subjects. This chapter goes into great detail in explaining the use and functions of the chart.

LESSON No. 9—NAVIGATING AND PILOTING INSTRUMENTS.
A chapter illustrating and describing the various instruments and devices used for keeping track of a boat's position in the course of a day's run. The lead line, the log the chronometer, the course protractor, and the bearing finder are well illustrated and their use described.

LESSON No. 9A—THE EYE SPLICE SIMPLIFIED.
Completely illustrated method for making a proper eye splice in the end of a rope.

LESSON No. 10—PILOTING
The navigator uses many ingenious tricks for determining his position when passing a fixed object on shore. This chapter is devoted to an explanation of many of these which are most useful to the small boat operator and a study of this subject will be found both interesting and instructive.

LESSON No. 11—TIDES AND CURRENTS
Continuing the subject of piloting with the addition of further useful information covering the methods of making proper allowances for tides and currents which are frequently met when operating a boat. Allowances for currents, both head on and oblique are completely described.

LESSON 11A—GOVERNMENT REGULATION OF MOTOR BOATS AND EQUIPMENT TO BE CARRIED ON BOARD

LESSON 12—FLAGS AND COLORS AND HOW TO FLY THEM
The correct method of flying flags on small boats is as important as many other subjects. This chapter illustrates every conceivable type of boat and the proper method of flying the flags on it.

LESSON 13—PRACTICAL HINTS ON SMALL BOAT HANDLING
Suggestions on Steering, Engine Room Signals, Action of Propeller, Winds and Currents, Indications of Shallow Water, Picking Up the Mooring, Anchoring and Docking, Some Additional Tidal Data, Hints on Navigation, and the Use of the Lead Line, Etc.

Questions and Answers on Lesson No. 1
Questions and Answers on Lesson No. 2
Questions and Answers on Lesson No. 3
Questions and Answers on Lesson No. 4
Questions and Answers on Lesson No. 5
Questions and Answers on Lesson Nos. 6 and 7
Questions and Answers on Lesson No. 8
Questions and Answers on Lesson No. 9
Questions and Answers on Lesson No. 10
Questions and Answers on Lesson No. 11
Questions and Answers on Lesson No. 12
Questions and Answers on Lesson No. 13

Price of Piloting, Seamanship and Small Boat Handling, Volume V, Ideal Series..... $2.00

Foreign Postage 50 Cents Extra

MoToR BoatinG, FIFTY SEVENTH ST. AT EIGHTH AVE., NEW YORK, N. Y.

Advertising index will be found on 3rd last page

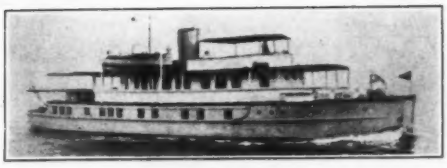
HENRY J. GIELOW INC.

Designers of America's Finest Yachts

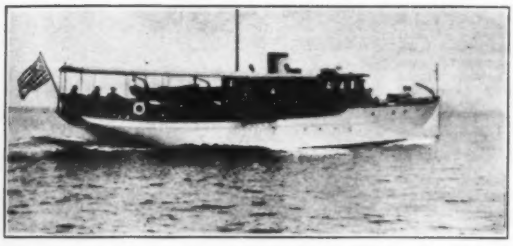
BROKERAGE DEPARTMENT

FOR SALE

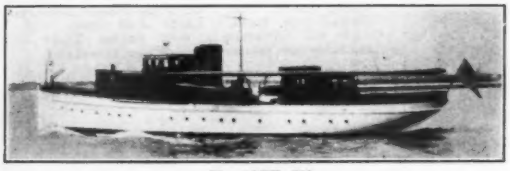
All of the yachts shown on this page are for sale. Some of them may be chartered. Select those which appeal to you most and we shall be glad to send complete information and prices. You are safe when buying through Gielow.



No. 9817—99'6"
TWIN SCREW HOUSEBOAT

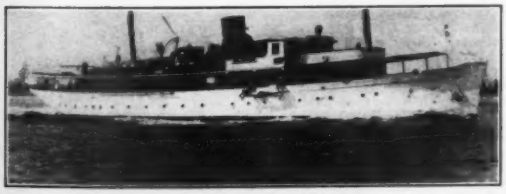


No. 9761—133'
TWIN SCREW DIESEL YACHT

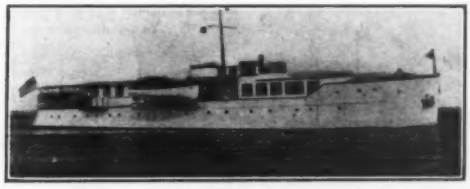


No. 10507—98'
TWIN SCREW DIESEL YACHT

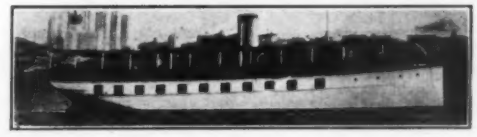
No. 9880—104'
TWIN SCREW DIESEL YACHT



No. 10166—161'
TWIN SCREW DIESEL YACHT

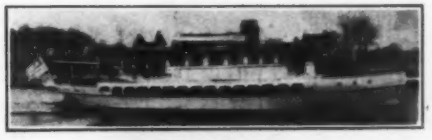


No. 10905—122'
TWIN SCREW CRUISER



No. 9962—88'
TWIN SCREW HOUSEBOAT

No. 11253—75'
TWIN SCREW MOTOR YACHT



No. 9472—80'
TWIN SCREW HOUSEBOAT

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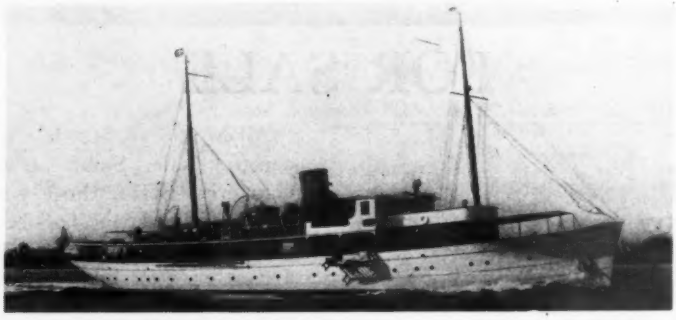
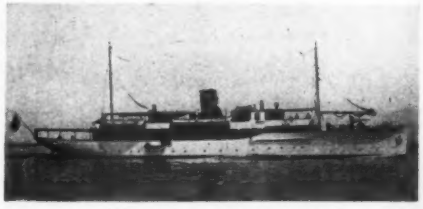


No. 5023 FOR SALE BY ESTATE — Modern steel 160 ft., Twin Screw Diesel Yacht designed by us and built under our supervision. Speed up to 14 knots. Two 6-cyl. 450 H.P. Winton Diesel Motors. Accommodations include six staterooms; deckhouse contains dining room, writing room and living room. All modern conveniences. Large deck space. Price most attractive.

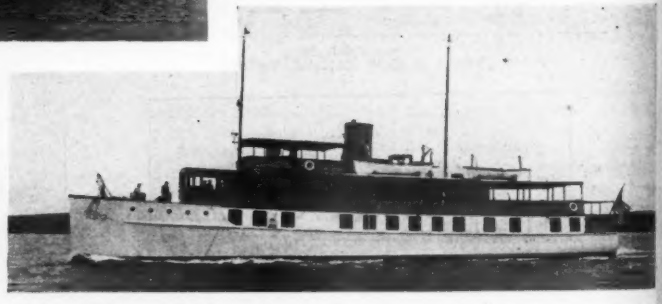
No. 5590 FOR SALE —Modern Twin Screw 75-ft. Cruising Power Yacht of recent build. Cruising speed up to 14 m.p.h. Two 6-cyl. 135 H.P. Gasoline Motors. Roomy cruising accommodations include four double staterooms, bath and three toilet rooms. Dining Saloon in forward deck house. Completely equipped with all modern conveniences, including hot water heat, Lux fire system, etc. Price very attractive for immediate sale.



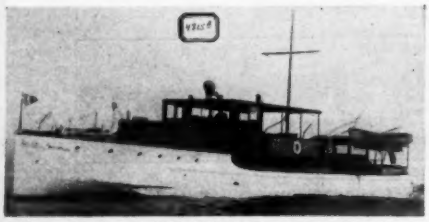
No. 4649 FOR CHARTER—Modern 172-ft. Ocean-going Twin Screw Diesel Yacht. Two 6-cyl., 350 H.P. Winton Diesel Motors. Accommodations include continuous deckhouse containing large dining saloon, library and living room. Below six staterooms, four baths. Large deck space with shelter deck aft. Practically only Diesel Yacht this size available for summer use. Price reasonable.

No. 5434

FOR SALE—Roomy, fast Cruising Power Yacht. 94 feet long, 15 foot beam. Built in 1928. Two 350 H. P. Winton Motors. Cruising speed 17 m.p.h. Large combined dining-room and living-room in sunken deckhouse forward. Below aft are two double, two single staterooms, three baths, toilet rooms. Large deck space. Attractively finished and furnished. All modern conveniences. Hull double planked. Built from our plans and under our supervision. Price attractive for immediate sale.



No. 4877 FOR SALE Steel, twin screw 112-ft. Cruising Houseboat. Two 6-cyl. 125 H.P. Winton Motors. Large deckhouse containing owner's stateroom and bath, combined living and dining room. Below are six staterooms and four baths. Heavily constructed in best manner. Beautifully finished and furnished. Price attractive. Write for further particulars.



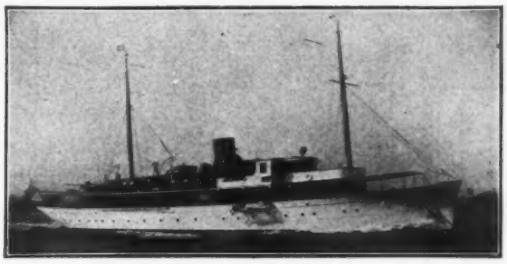
No. 4815 FOR SALE—Fast 80-ft. Twin Screw Power Yacht. Two 6-cyl. 225 H.P. Motors. Speed 16 miles. Three double staterooms, shower bath and two toilet rooms. Dining saloon in deckhouse forward. Large deck space. Price reasonable for a quick sale. Further particulars on request.

No. 5520 FOR SALE—Twin Screw 66-ft. Consolidated Commuter. Speed up to 22 miles. Two 6-cyl. 170 H.P. Speedway Motors. New 1929. Double stateroom; dining saloon in deckhouse. Forward and after cockpits. Splendid condition. Unusually attractive price.

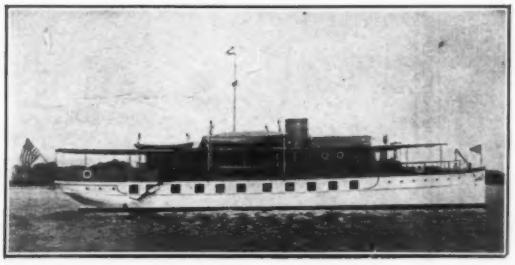
The
YACHTS

illustrated on this page represent only a few of the large number listed with us FOR SALE or CHARTER. Let us know your requirements.

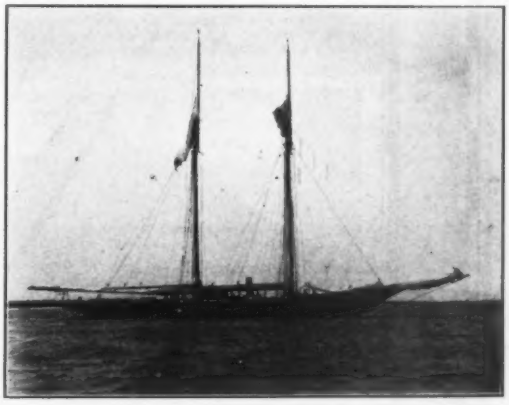
Advertising index will be found on 3rd last page



No. 9281—For Sale—160′ offshore steel Diesel yacht, built in 1926, powered with two 450 h.p. Diesel engines. Speed 14 knots cruising radius 6500 miles. 4 double, two single staterooms and five baths. Fully equipped and in perfect condition.

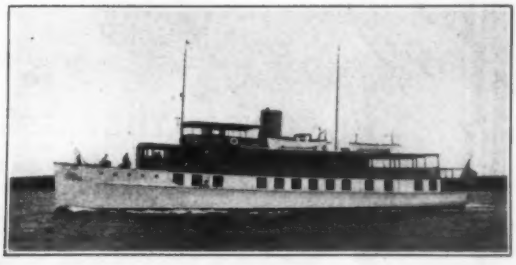


No. 1769—For Sale or Charter—103′4″ Yacht. Four double staterooms and one single, including three bathrooms. Powered with two Winton motors of 250 H.P. each.



No. 101—For Sale or Charter—famous sea-going auxiliary schooner, steel construction, designed by J. Beaver Webb, 171′ 5″ o.a., 125′ w.l., 28′ beam, 17′ draft, speed under power 9 knots —4 staterooms 4 additional berths in salons.

No. 1093—For Sale—Famous three-masted auxiliary schooner. 204′ 6″ overall—167′ on the waterline. 32′ beam, draft 14′ 6″. Unusually well constructed, built in 1923, equipped with a 600 h.p. Burmeister-Diesel. Speed 11-12 knots under power. Five double and two single staterooms.



No. 1786—For Sale or Charter—111′ 6″ Steel Yacht. Completely equipped and furnished throughout. Has 27 K.W. Generator and 60 ampere Edison batteries. All auxiliary pumps in duplicate: all deck houses and trim of Teak. Powered with two Winton motors 125 H.P. each.

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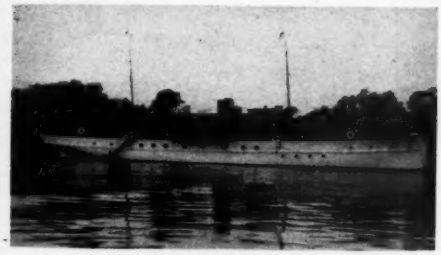
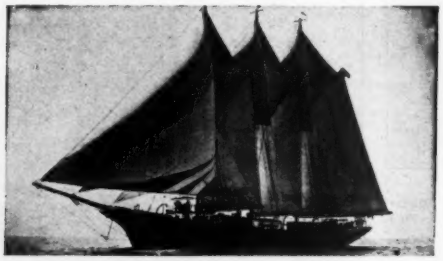
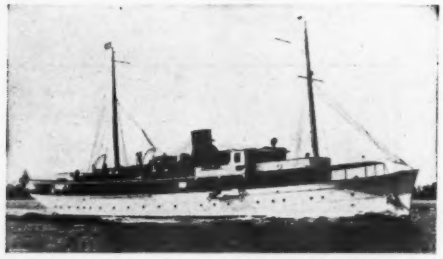


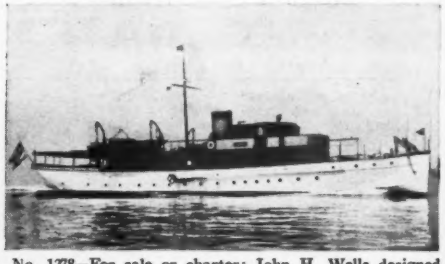
No. 376—For charter: Twin screw gas yacht, 99' long, 15'9" beam, 4'9" draft, 3 double rooms—two baths—deck house includes dining salon and galley. Boat in fine condition and fully equipped.



No. 2410—For sale: Steel Diesel auxiliary schooner yacht, 204'6" L.O.A., 14'6" draft. One of the finest schooners in existence. Complete in every detail. In full commission and ready for immediate delivery.



No. 944—For sale: 160' steel Diesel yacht. Winton engines. Two double rooms, four single rooms, five baths and six toilets. Boat thoroughly modern in every respect. Now in commission. Immediate delivery if desired.



No. 1278—For sale or charter: John H. Wells designed 126' steel twin screw Diesel yacht new 1929. Powered with Winton engines, speed of 13 miles. Four double rooms, three baths. Deckhouse includes living room, smoking room, dining room. Beautifully equipped with all modern pumps and refrigeration. Beautifully furnished.

No. 1272—For sale: 73' twin screw cruiser—new 1928—Sterling powered—speed of 17 miles. Has one double room, two single rooms, four berths in cabin, one bath, three toilets. Boat in perfect condition.

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Of course . . . everybody is keen to see the outcome of the America's Cup Races. But how? The ideal way to see any race is from the afterdeck of your own craft. If you haven't a boat, now is the time to charter or buy one from the John H. Wells, Inc., list of available craft.

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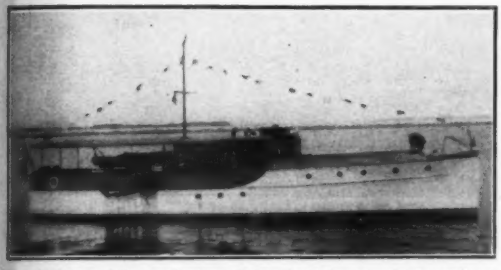
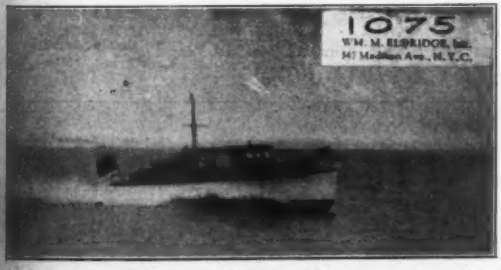
No. 1144—Hand designed auxiliary 50 x 13 x 5'6" Sterling powered. Has sleeping accommodations for five. Specially designed for cruising anywhere. Far better condition than a new yacht. WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.

No. 1345—For Sale or Charter 75' T. S. Cruising yacht. 2 Single 2 double staterooms. Motor entirely overhauled 1930. Must be seen to be appreciated. Inquire WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.

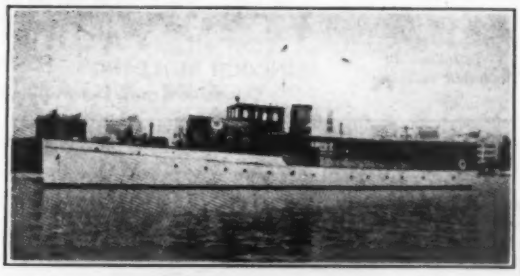


No. 1229—For Sale or Charter 65' T. S. Cruiser completely equipped and furnished in perfect condition. 2 Double staterooms, shower and two toilets in owner's quarters. Powered with two Speedways in A-1 condition. For further particulars inquire WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.

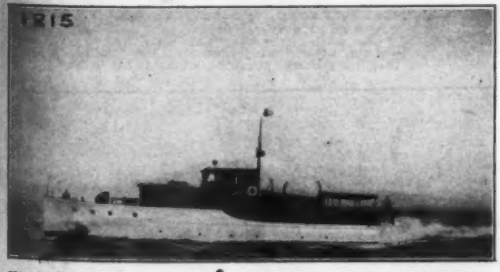
No. 1083—At a sacrifice 45' express cruiser used total of three months. Two Hall-Scott motors in perfect condition. Just being placed in commission. Inquire WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.



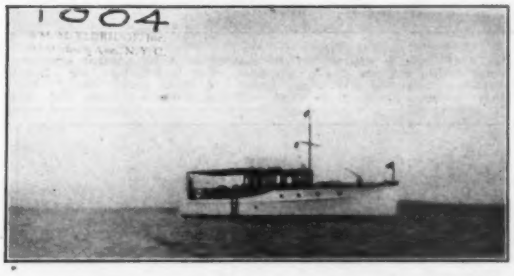
No. 1075—33 MPH is the speed of this 47' express cruiser. Two Capital Libertys. Electric refrigerator, electric windlass, separate lighting plant. Inquire further particulars of WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.



No. 2522—Entirely refurnished in 1929 this 100' T. S. Winton powered Diesel is offered for sale. Grand piano, radio transmission. Inquire WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.



No. 1194—All the accommodations of a yacht twenty feet longer. 3 Staterooms, bath, two toilets. Every possible accessory. 55' Two motors WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.



No. 1004—43' x 10'2" x 3'3" Sleeps 8. One bath, two toilets. Complete and in splendid condition. Maybach powered. Ready to go. Inquire WILLIAM M. ELDRIDGE, Inc., 347 Madison Avenue, New York, N. Y.

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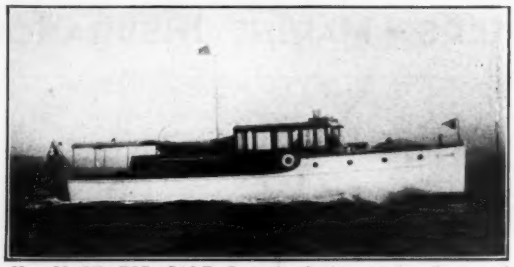
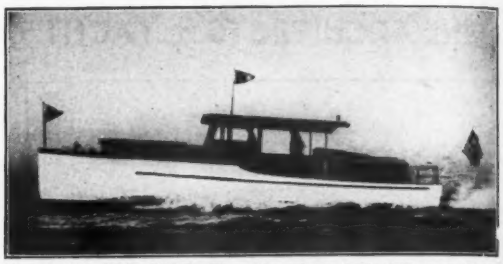
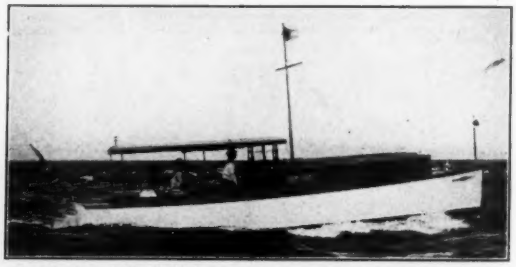


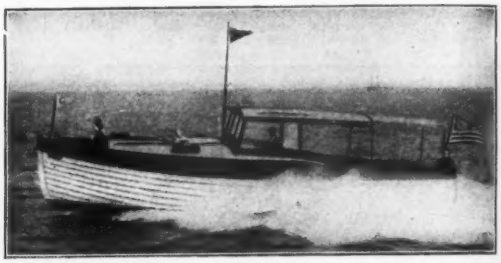
No. M-4562—FOR SALE—Several of the popular Dawn 45' Cruisers. We will be very glad to send complete list of available boats upon request. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York.



No. M-4473—FOR SALE—Elco 38' cruiser, built 1928, new Hall Scott motor installed late 1929. Sleeping accommodations for six, two toilets, galley, etc. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York.



No. M-4516—FOR SALE—One of the popular Elco 34' Cruisettes. Sleeping accommodations for four, toilet, galley and roomy cockpit. For further data consult SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York.



No. M-4506—FOR SALE—Several of the popular Banfield boats. Will gladly send complete list of available boats on request. SPARKMAN & STEPHENS, Inc., 11 East 44th Street, New York.

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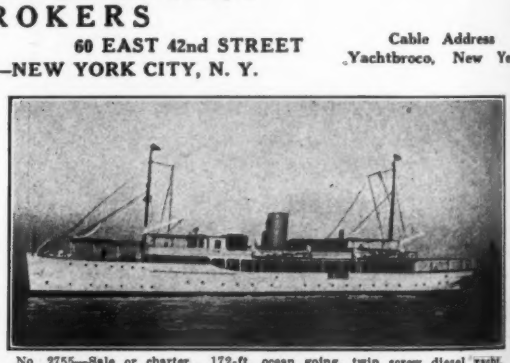
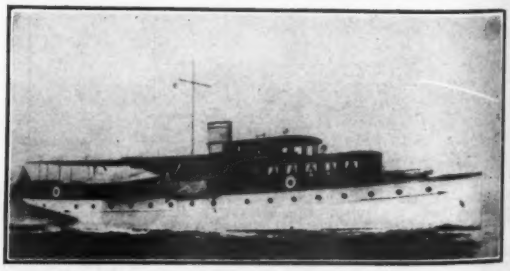
No. 4765—Sale or charter. 67 ft. twin screw diesel powered houseboat. Three double and one single staterooms. Two toilets, bath, etc. Roomy deckhouse containing pilot-house, dining and living room. Two 75 H.P. diesel motors. Speed 12-13 miles. Electric plant, hot water heat, Lux fire system, etc.



No. 2755—Sale or charter. 172-ft. ocean going, twin screw diesel yacht. Four double and two single staterooms, four baths. Large deckhouse containing dining saloon, library, living room, etc. Two 350 H.P. Winton motors. Speed 12 miles cruising. Cruising radius 10,000 miles.

No. 3134—68-ft. twin-screw express cruiser. Hull double planked mahogany. Fittings and furnishings of the very best. Two double staterooms, dining and living room. Cockpit in bow. Two 300 h.p. Sterling motors. Speed 24 miles. One of the best express cruisers available.



No. 3110—85-ft. twin screw power yacht. Two double and two single staterooms. Two bath rooms. Large deckhouse containing dining saloon, pilot-house, and living room. Two 100 H.P. motors. Speed 12-14 miles. 110 volt Universal generator. Hot water heat. Splendid cruising yacht. Beautiful condition.

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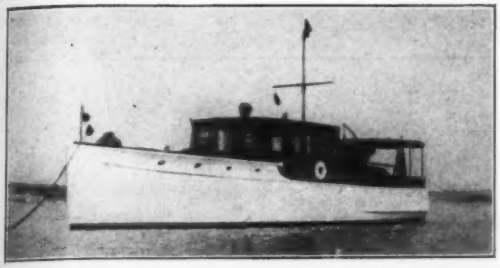
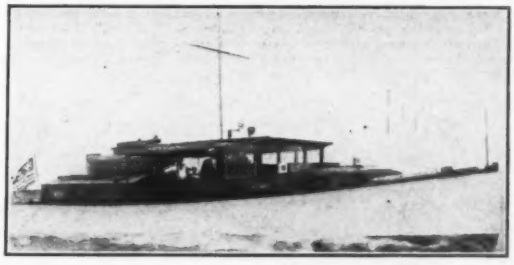


NO. 793—Beautiful Lawley 56' Double Cabin Cruiser, built 1928 in the best manner. Has two Sterling engines, giving speed of 18 to 20 mi. Luxurious accommodations Condition perfect. Fully in commission.

NO. 1038—FOR SALE—Elco Veedette. Built in 1922. Speed 20 miles Sleeps four. Galley and toilet. Owner anxious to sell. Condition good as new.

NO. 1129—One of the popular A. C. F. 30' double cabin cruisers. Sleeps six. Eight cylinder, 110 H.P. motor gives speed of 16 to 17 miles. This boat was new in 1929, but can also offer 1928 boat.



NO. 1075—Popular 46' Matthews double cabin open bridge cruiser. Double berth in owner's cabin forward, four berths in after cabin, each has enclosed toilet room. Sterling motor giving speed of 17 miles. Boat only one year old and in excellent condition.

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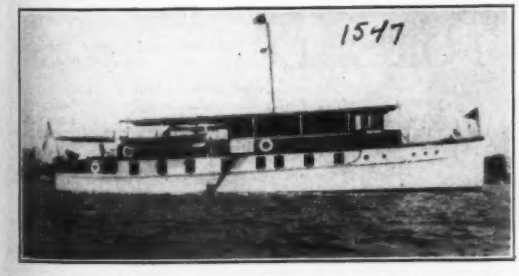
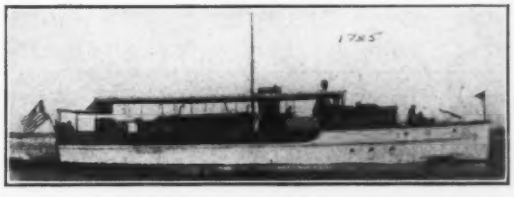
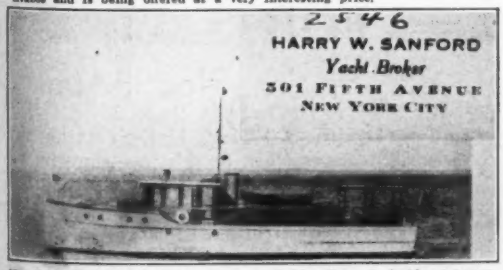
GEO. W. ELDER
Associate



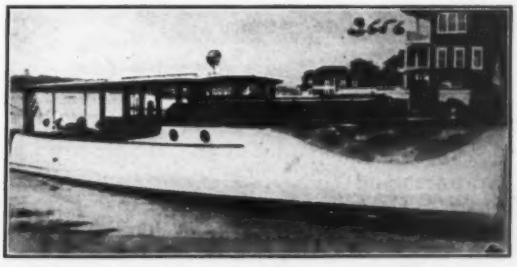
No. 1547—For Sale—76' T. S. Houseboat, speed 14 miles, three comfortable staterooms, deck dining salon, bathroom, etc. This yacht is very livable and is being offered at a very interesting price.



No. 1785—For Sale or Charter—60' Twin-Screw Cruiser, speed 18 miles, 1 double, 2 large single staterooms, 2 berths in lobby, sunken deck salon. An unusually attractive yacht which should appeal to a discriminating yachtsman.



No. 2546—FOR SALE—56' cruiser, speed 12 miles. 1 double stateroom and salon sleeping 6 persons, 2 berths forward and w. c. for crew. Very nicely arranged, well built and a very attractive cruiser.

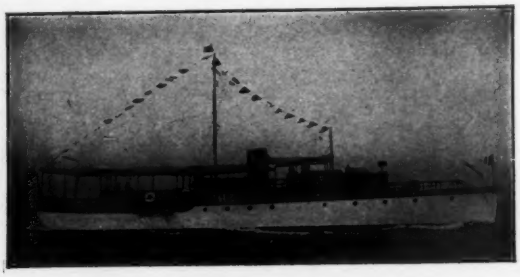


No. 2656—For Sale—Beautifully constructed 1929 day boat or cruiser, sleeping 4 persons. Speed 15-18 miles. Very roomy and able, with a delightfully large cockpit. Has galley, toilet, etc., and is a very smart looking craft.

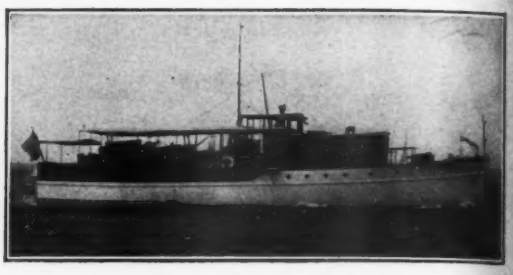
FOR SALE

NEW YORK YACHT, LAUNCH & ENGINE CO.

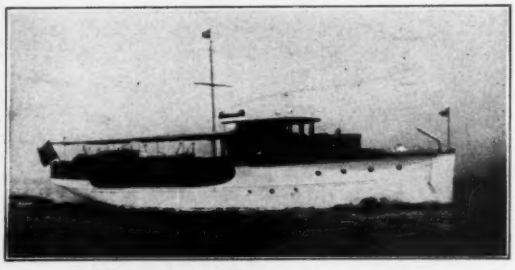
Morris Heights, New York City
Phone: SEDgwick 4880



NO. 1002—Eighty-five-foot, twin screw cruiser of Gielow design, powered with two new six-cylinder 6½" x 8½" Twentieth Century engines. Owner's accommodations consist of two double and one single staterooms and bathroom. Large dining saloon in deck house. Special value. Terms.



NO. 1012—Cruising Yacht, 75' x 15'. Equipped with two 6-cyl. 100 H.P. 20th Century Motors. Layout consists of two double and two single staterooms, two bathrooms and deck dining saloon. Can be seen at any time.



NO. 1008—SUNSHINE II—80' x 14' x 4'. In commmission. Can be delivered immediately. Practically new. Owner building larger yacht. Send for details.

NO. 1011—High Speed Commuter. 47' x 10' 6" x 2' 9". 25 to 30 miles per hour. Two years old. Perfect condition.

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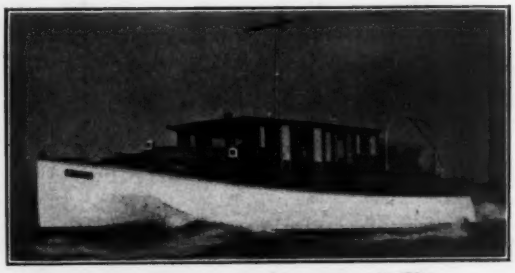

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